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SECOND ARTICLE.

NATURAL FOODS.

To recapitulate concisely what has been outlined in our previous article: Foods are divided into organic and inorganic. Organic foods are either nitrogenous or non-nitrogenous. Nitrogen enters largely into the composition of the tissues; it must, therefore, be introduced in the form of food, to compensate for the loss which is continually taking place. The more important nitrogenous principles present in the food are: albumen, fibrin, casein, gelatin and chondrin; in vegetables, fibrin and casein exist as gluten and legumin. The chief foods of this class are of animal origin, *e. g.*, eggs, milk, cheese, and all varieties of meat. Meat is the material, *par excellence*, for repairing the wear and tear of the bodily machinery, and supplying a stimulus to augmented muscular action; but after the necessary renewal of the tissues is provided for, the best aliments for the steady production of *heat* and *force* are non-nitrogenous matters, such as oil, fat, sugar, starch, gum, etc. When, therefore, bodily work is increased, not so much extra meat, as vegetable food, or its dietetic equivalent, fat, is demanded.

As regards brain work, we are taught by physiologists that for the integrity of thought, integrity of the nervous system is requisite, and for the integrity of the nervous tissue a due quantity of such food as contains digestible phosphatic salts.

Let us now consider separately some of the leading articles of every-day diet, with the object of finding out how far they conform in the above requirements.

Milk—Milk may be regarded as a typical alimentary fluid, presenting in itself the proper proportion and variety of material for the nourishment of the body. Most, if not all, of its constituents, judging from the variations which have been observed in their proportions under different dietetic conditions, appear to be formed from changes in the protoplasm of the epithelium cells. Cow's milk, the most important and valuable kind, is chemically composed of an emulsion of fatty globules (cream) in a watery alk-

aline solution of casein, and a variety of sugar peculiar to milk, called lactose. The fat and the lactose constitute the carbonaceous portion of the fluid. The casein and the albumen form the nitrogenous, while the complex saline substances and water are the mineral constituents. Milk also contains certain caseous elements in small proportions—carbonic acid, sulphureted hydrogen, nitrogen and oxygen—besides minute quantities of other principles, galactin, lactochromin, leucin, pepton, creatin, tyrosin, etc., which have not yet been thoroughly investigated. The salts consist chiefly of phosphoric acid, lime, potash and iron. The most important of the differences between human and cow's milk is that the fraction of the total albumenoids in cow's milk which is coagulable by acids is far greater (perhaps four times) than the non-coagulable parts. In woman's milk the reverse is true, and the non-coagulable part much exceeds (perhaps by more than twice) the coagulable portion.

This glance at the average composition of milk enables us readily to understand why it takes rank as one of the most digestible and nourishing of all foods, and hence extremely valuable in many forms of disease, as well as for the sustenance of the weakly and growing organism. The large quantity of water makes it pass easily through the soft absorbent walls of the digestive canal, and the complete suspension in an alkaline fluid of the finely divided fat and nitrogenous matter introduces more of them than could be effected were they in a solid form. The fat is the germ of new cellular growth, and the nitrogenous matter is, by the new cells, formed into flesh. The phosphate of lime enters into the composition of the bones, while the chloride of sodium and the iron are taken up by the blood. Only a slight chemical change is requisite for the adaptation of all these ingredients to their several purposes. It is evident, therefore, that milk, in its natural state, is a nutritive substance which cannot be improved by any artificial admixture, and for which no substitute can be advantageously provided. Even the much vaunted Liebig's food, for example, is not nearly such a close imitation of nature as may be made by the addition of fresh cow's milk to half its bulk of soft water, in each pint of which has been mixed a heaped up tablespoonful of powdered sugar of milk and a pinch of phosphate of lime. Indeed, in default of these cheap chemicals, the milk and water alone, when fresh and pure, are safer than an artificial

compound which requires cooking. Neither is an exclusively milk diet in the case of adults at all allied to starvation. Dr. George Johnson, in reply to the complaints and petitions of patients who regard it in this light, is in the habit of quoting the case of a gentleman who, in 1873, at the age of fifty-five, being seriously ill with disease of the kidney, the result of too generous living, was placed upon an exclusive milk diet, which he continued uninterruptedly for a period of nearly five years, never taking even a biscuit or a piece of bread, except when he was travelling and could not obtain milk. He lived in the country, and kept his own Alderney cows, which gave milk so rich in cream that he found it necessary to have the milk skimmed in order to obviate his tendency to obesity. His usual allowance was a gallon of skim milk daily. During the fifth year of an exclusive milk diet he declared that he never felt better in his life; he was cheerful, slept well, and, at the age of sixty, was capable of taking a considerable amount of active exercise. Since then, he has gradually returned to ordinary diet, his health being completely restored.

Buttermilk is a true milk peptonoid. Besides being most grateful and refreshing as a beverage, it is the very best of food, and possesses medicinal properties of considerable value. Being a food, it should not be taken between meals.

Condensed milk is milk in a pure and safe form. It is also more digestible than ordinary cow's milk—a fact which is admitted even by those who are opposed to its use. It is less liable to turn sour in the bottle—a great advantage when this mode of feeding has to be resorted to—nor does it decompose so readily in the stomach. It has frequently been observed that children fed on cow's milk are troubled with flatulency, diarrhoea, green stools and want of health generally, and that, on changing the food to condensed milk, these symptoms at once disappear, and a most healthy condition of the body is induced. Moreover, the quality of cow's milk varies with the food supplied to the animal; and besides this, the change of a cow, the introduction of a new cow into the dairy, the use of the milk before it is quite free from the colostrum—all these have frequently been accompanied by dangerous results. This cannot happen with condensed milk; the disadvantages of the article are that, when diluted until its percentage of water is about the same as in human milk, it has relatively too little fat, and too little sugar—the larger proportion of the latter being also cane sugar—as compared with human milk. It has also too much albuminoids and ash.

Preserved milk marks a great advance in the technique of the milk industry. It has no cane sugar and is similar in the ratio of its constituents to ordi-

nary cow's milk. Its keeping qualities are also very remarkable. Like condensed milk, it requires the addition of some bland inert constituent, such as torrefied wheat or barley flour, to make it an acceptable food for infants.

Scherff's process for preserving milk consists in simply putting new milk, without any addition, into glass bottles, stoppering and then heating by steam to a temperature from 212° to 248° F., under a pressure of from two to four atmospheres. Cow's milk thus treated is said not to be coagulable by rennet, and even when acidified or allowed to sour, yields a fine granular coagulum, which the infant can digest without distress. It is claimed to be "the nearest approximation now known to nature's food for infants." The peculiar vital or maternal properties of human milk must always elude analysis.

Koumiss, or milk wine, has been manufactured by the Arabs for many centuries, and is now extensively used in certain portions of Russia. The original article is made of mare's milk, but a good imitation can be prepared as follows: Fill a quart champagne bottle up to the neck with pure milk, add two tablespoonfuls of white sugar, after dissolving the same in a little water over hot fire; add also a quarter of a two cent cake of compressed yeast. Then tie the cork on the bottle securely and shake the mixture well. Allow it to stand in a warm place (50° to 95°) for six hours, and finally in the ice-box over night.

It is probable that all the virtues of koumiss are present in the milk from which it is prepared, so that it is only valuable so far as it is a convenient form in which the essential properties of milk can be preserved for use.

Ass's milk has been proved to be greatly superior to cow's milk in the nutrition of infants under three or four months of age, but as it cannot always be obtained, mare's milk will be regarded as a boon by many. A stud and factory for the production of mare's milk have been established near Orenburg, on the borders of the steppes of Southeastern Russia. It is put up in tins weighing ten ounces. Its consistency is thick; it is white in color, and has a honey-like taste. Not more than three per cent. of cane sugar is added. The milk is condensed to one-eighth of its bulk, *i.e.*, one-sixth of its weight.

Butter, of good quality, is a most digestible form of fat, while its flavor is so delicate and little pronounced that it is always acceptable to the palate. Consumptives should use it liberally.

Butterine—*Artificial Butter*—*Oleomargarine*—when manufactured according to the original process of its inventor, M. Mouriès, was declared by the French officials, who examined it, to go much further as food than the genuine article, and forms a perfectly wholesome dietetic material. In Europe,

no doubt, it is safer and more nutritious than the unsavory rancid butter so freely sold among the poorer classes.

Cheese, in point of mere nutritive value, stands at the head of all foods. A half-pound contains as much nitrogenous substance as one pound of meat and half a pound as much fat. In its raw state, however, it is exceedingly difficult of digestion, and hence is unsuited to invalids, and, in fact, to almost every one, excepting marching soldiers and vigorous out-door laborers. A method of rendering cheese digestible, by cooking it with potash-salts, has recently been proposed by Prof. Mathieu Williams, of London. It appears to be of decided value, but, unfortunately, is inapplicable to a great deal of American cheese, owing to the adulteration of the latter with lard.

Meat.—The advantages of meat as a diet are: its large amount of nitrogenous substance, the union of this with much fat, the presence of important salts (viz., chloride of potassium, phosphate and carbonate of potassium, or a salt forming carbonate in incineration), and iron. It is also readily cooked, and is very digestible; it is probably more easily assimilated than any vegetable, and there is much more rapid metamorphosis of tissue in carnivorous animals than in vegetable feeders. Whether the use of large quantities of meat increases the bodily strength or the mental faculties more than other kinds of nitrogenous food is uncertain. There seems no doubt, however, that it is more serviceable than any other diet in enabling the system to bear up under *sudden and unaccustomed muscular exertion*, as in Alpine climbing; and facts appear to show that a greater amount of hard bodily work can be accomplished in a shorter time by men who are supplied with meat than by those confined to vegetable and farinaceous food. In advanced age, the use of meat becomes less necessary, Rheumatism, especially, is often brought on by its injudicious use. Athletes in training are fed chiefly on the lean of beef and mutton, in order to reduce their weight; but soldiers, in active service must be supplied with food containing more carbon, such as ham and sausages, which should always be eaten cold.

In regard to the digestibility of butcher's meat, a good deal depends upon its condition at the time of cooking. The old Romans, who were great epicures, suffocated their fowls in wine, and cooked them forthwith. Both meat which is perfectly freshly killed, and also meat which has been kept for a time are tender. If we analyze this condition, we see that it is simply this: Meat which is cooked before *rigor mortis* appears, or after it has passed off, is tender; meat cooked while *rigor mortis* still exists is sure to be tough. In the case of game, the practice of keeping the meat until it is tender has been overdone, and it is not unfrequently kept until it is actually com-

mencing to decompose. The taste for "high" meat is acquired, and is probably a morbid one. It is also not without some danger. It is rather extraordinary to what an extent the consumption of decomposing food may be carried without any immediate injury, as we see among the Esquimaux and Icelanders.

The effect of keeping may, to a certain extent, be imitated by the application of a vegetable digestive ferment. In the West Indies, a tough beef steak is rendered tender by rubbing it with the juice of a fresh papaw fruit, which contains a ferment, papaine, having an action very much like that of trypsin of the pancreas.

In boiling meat the loss of weight is about 20 to 30 per cent., sometimes as much as 40. If it is wished to retain as much as possible of the salts and soluble substances in the meat, the piece should be left large, and should be plunged into boiling water for five minutes to coagulate the albumen. After this the heat can scarcely be too low. The hæmatoglobulin coagulates at 150° to 162°, below which temperature the meat will be underdone. If the temperature is kept above 170° the muscular tissue shrinks, and becomes hard and indigestible.

To make good broth, the meat should be cut small and put into cold water, and then warmed to 150° F. Beef gives the weakest broth; mutton broth is a little stronger, and chicken broth strongest of all.

Broth made without heat, by the addition of four drops of hydrochloric acid to a pint of water and a half pound of beef, is richer in soluble albumen. If rather more hydrochloric acid is used, but no salt, heat can be applied, and if not higher than 130° F., nearly 50 per cent. of the meat can be obtained in the broth.

In roasting, the meat should be first subjected to an intense heat, and afterward cooked very slowly; the dry distillation forms aromatic products, which are in part volatilized; the fat is in part melted, and flows out with gelatine and altered extractive matters. The loss in baking is nearly the same or a little less.

Stewing is virtually the same as roasting, only the meat is cut up, is continually moistened with its own juices, and is often mixed with vegetables. Like boiling and roasting, it should be done slowly, at a low heat. In all cases there is one grand rule, viz., to cook the meat slowly, and with little heat, and, as far as possible, to let the loss be water only. The thermometer will be found very useful, especially in showing cooks that the temperature is often much higher than they think. In the cooking of salt meat, the heat should be very slowly applied, and long-continued; it is said that the addition of a little vinegar softens the hard sarcolemma, and it is certain that vinegar is an agreeable condiment to take with salt meat, and is probably very useful.

Meat may be kept for some time by simply heating the outside very strongly, so as to coagulate the albumen; or by subjecting it to the action of sulphur, charcoal, strong acetic acid, or weak carbolic acid. Injections of alum, aluminum chloride, or common salt will have the same effect. The application of sugar to the surface is also a good plan. Meat can be preserved in ice for an unlimited period, and the supposed rapid decomposition, after thawing, seems to have been exaggerated. Meat is also preserved in tin cases, either simply by the complete exclusion of air (Appert's process), or by partly excluding air and destroying the oxygen of the remaining part by sodium sulphite (McCall's process). When properly prepared, in either of these ways, it does not give rise to diarrhoea. Various other plans have been proposed, such as the use of antiseptics, carbolic acid, borax, salicylic acid, but any of these agents is very likely to affect the general system injuriously.

Beef tea, and the various extracts of meat, meat juices, etc., are valuable chiefly on account of their stimulating properties, as they contain very little actual nourishment. In this respect they are vastly inferior to the powder of beef, as employed by Dr. Debove, of Paris, in the treatment of diseases of inanition. This preparation both represents the actual nutritive value of the beef and stimulates in an unusual manner the functional activity of an enfeebled stomach.

To make one pound of powder about six pounds of fresh beef are required, one pound of the powder is equal to at least four of pure muscular fibre. Of this as much as 400 or 600 grammes have been given by Debove daily, the latter quantity being equal to five pounds of beef.

Broca says that he has shown, by experience, that it is digested five times as rapidly as ordinary beef.

Cereals.—In chemical composition there is but little difference between animal and vegetable foods, and both evidently serve the same purposes in the human economy. The meat-eater and the man who lives on corn, or peas and rice, are equally well nourished. The former, on account of the supposed speedier evolution of energy from his food, is commonly considered to have an advantage over the vegetarian as regards activity of movement and the capability of sudden and violent exertion. Yet the racing performances of the horse and the lightning-like movements of the wild antelope or cow, show that vegetable feeders can put forth even greater speed than the tiger or the wolf; and, among men, the well-fed corn-eater, and even the well-fed rice or pea-eater, will exhibit, when in training, no inferiority to the consumer of meat. It appears, from Dr. Beaumont's experiments, that animal food is digested sooner than farinaceous, and possibly meat might,

therefore, replace more quickly the wasted nitrogenous tissue than bread or peas; and it may be true, as asserted, that the change of tissue is more quick in meat-eaters, who require, therefore, more frequent supplies of food. Even this, however, is not thoroughly proved.

Certain it is, that man cannot maintain himself, in perfect nutrition, for an unlimited period, on meat alone; whereas vegetables and cereals are his sole subsistence over large areas of the globe. On the whole, it seems reasonable to conclude that a mixed diet is that which is best adapted to mankind in general. If we were devoid of the intelligence which enables us to fit food for digestion by cookery, it is probable that no diet would suit us better than the fruits of the earth. But it is surely quite as natural for a man to cook and eat everything that contains in a convenient form starch, fat, albumen, fibre and phosphorus as it is for a monkey to eat nuts and an ox grass.

Among the cereals it has been supposed that there is a difference in the nutrition of even such nearly allied substances as wheat and barley, but the evidence is imperfect, and is, perhaps, dependent on differences in ease of digestion.

The vegetable fats appear more difficult of digestion than the animal.

The various carbo-hydrates are generally supposed to be of equal value. It is, observable, however, that even when sugar is very cheap and accessible, it is not used to replace starch entirely; but this, perhaps, may be a matter of taste.

COCA AND ITS ALKALOID.

BY T. M. STRONG, M. D., NEW YORK.

THE erythroxyton coca is a native of South America and is cultivated largely in Peru and Bolivia. It grows wild, but under cultivation forms an important crop. The leaves, which are the parts used, have a slight odor suggestive of tea, while the taste is astringent, somewhat bitter and aromatic, and imparts a sensation of warmth to the mouth, very similar to that experienced when tasting the tincture of aconite root. Bad specimens have a camphoraceous smell, brownish color and lack the pungent taste. The natives eat the leaves, often mixing with it a small quantity of pulverized, unslacked lime, or a preparation of the ashes of the quinoa plant. Two or three ounces a day may thus be used for years.

Coca was employed in ancient times by the South American Indians as an offering to the sun, or to produce smoke at the great sacrifices; and the priests, it was believed, must chew it during the performance of religious ceremonies, otherwise the

gods would not be propitiated. In 1567 the Church declared this drug "a vain thing," and denounced it as a worthless substance, fitted for the superstitious misuse of the Indians.

Much has been written on the wonderful sustaining properties of this plant. This action was known for centuries. Even as far back as 1700 we have the poet writing thus :

"Our Varicocha first this Coca sent,
Endowed with leaves of wondrous Nourishment,
Whose Juice suck'd in, and to the Stomach ta'en
Long Hunger and Long Labor can sustain :
From which our faint and weary Bodies find
More Succor, more they cheer the drooping mind,
Than can your Bacchus and your Ceres joined.
Three leaves supply for six days' march afford,
The Quitoita with this Provision stor'd
Can pass the vast and cloudy Andes o'er."

And Mantegazza writes, "God is unjust for having made man live without coca : I would prefer a life of ten years with coca to one of ten thousand centuries without."

Many other writers and travellers speak of this drug in the highest terms but not in the extravagant language of the one just quoted. Thus Weddell (1858) says : "its effects appear to be gentle and sustained ; that it seems rather to affect the whole system than the brain alone ; and although without any true nutritive powers, it affords a support which differs from that of all other stimuli in not being transient and leaving no reactionary depression."

This writer could not discover any injurious effects even in those who chewed it to excess. Garcilasso, another writer, confirms the statement of its non-injurious character. Tschudi says, that the natives begin its use at a very early age, and he cites numerous instances of longevity in those addicted to its use, and arduous tasks which were often performed with no other nourishment than that afforded by chewing the coca leaves. Pöppig, on the other hand, says that coca is as dangerous as the use of opium and Lloyd alludes to it as a poisonous narcotic.

Sir R. Christison in the *British Medical Journal*, 1876, mentions some interesting results from the use of coca while undergoing prolonged physical exercise. In these cases it was found that the use of coca prevented the excessive fatigue usually attending upon the taking of long walks with short intervals of rest and without any food.

Dr. Searle in his essay on Erythroxyton Coca refers to the experiments of Dr. Dowsdell of London, (*Lancet*, 1876) to determine whether coca tends to limit the wastes of the tissues. The experiments were incomplete, as the observations were limited to the temperature, pulse and urea. The phosphates and chlorides were entirely overlooked. The amount of exercise was recorded ; the food taken was similar

in quantity and quality ; the whole amount of urine for twenty-four hours was mixed and examined within one or two hours ; the absence of sugar and albumen was noted. The urine was examined for ten days, when he walked eighty-four miles without coca, and for twelve days, during which he walked ninety miles, and took about one-half pound of the leaves. The difference in favor of coca was only .03 of one per cent. His conclusions that coca has no effect, because it did not affect the pupils, heart or skin, and did not produce either drowsiness or wakefulness, are considered premature, since only urea was tested for, and that the leaves, being seven years old, were probably inert.

Dr. Searle also gives the results of experiments where the use of a mixture of spirits and fluid extract of coca in equal parts gave :

Chlorine, increase of.....	0.050 per cent.
Urea, decrease of.....	0.216 " "
Phosphoric acid, decrease of.....	0.013 " "

When $\frac{5}{8}$ j. of the leaves was used every day :

Chlorine, decrease of.....	0.19 per cent.
Urea " "	0.196 " "

Coca in small quantities seems to act as a stimulant to the nervous centres (cerebro-spinal). The evidence in favor of its power to increase the ability to bear fatigue more easily than could be done under ordinary circumstances and with a less amount of nourishment is undoubted. Some experimenters have stated that in animals fed on coca alone the death was speedier and the loss of weight greater than would be caused by starvation alone. Dr. Unanne states, on the other hand, that in the siege of Pez all the inhabitants died of hunger except those who were fortunate enough to possess some coca leaves, and they suffered very little.

Dr. Smith refers to it and says "that it increases nervous energy, removes drowsiness, enlivens the spirits, and enables the Indian to bear cold, wet, great bodily exertion and even want of food to a surprising degree, with apparent ease and impunity." He never saw any of the ill-effects ascribed to the use of large quantities of the plant, such as tremor or mania. Small doses give hyperæsthesia with an apparent loss of co-ordination. Large doses disturb motility to a greater extent, so that tetanic convulsions have been produced, in experiments on animals.

In the *North American Journal of Homæopathy* (quoting from *Schmidt's Jahrb.*) we find that a cold infusion of coca (10-150 grms) produced a strong irritation of the cerebro-spinal system similar to that produced after drinking coffee and rum together. Stimulation of cerebral functions, increased inclination to bodily labor, hastiness of all motions, espe-

cially when writing. After taking 100 grms. more, the action showed on his imaginative faculties—he could not restrain a continuous laughter. His hands trembled after going to bed; he threw himself from one side to the other, feared to lose his balance; jumped out of the bed and ran around the room.

A cold infusion is said to reduce the temperature of the body.

Mantegazza says that large doses may produce fever and slight constipation, but in a suitable dose it acts as a stimulant to the stomach and aids digestion. In small doses it produces a stimulation of the nervous system, increasing muscular activity and rendering it independent of external influences, and causing a peculiar sense of quietude.

Morenoy Maiz concluded from his study of the drug that its long use produced impairment of digestion, emaciation, jaundiced look, uncertain gait, fixity of the eyes, pale lips, tremblings, foul breath, and that the patient gradually becomes apathetic, loses sleep and appetite, and finally succumbs to dropsy and general marasmus. (*Practitioner*.)

Dr. Alex. Stewart in a letter to Dr. Searle, after speaking of the effects of the plant when used daily, adds: The narcotic effect is not so prominent a feature as its power to prevent hunger, thirst and need for sleep. I have frequently seen patients, when convalescing from fevers, use large quantities of it. It has also the power of mitigating the difficulty of breathing, hæmoptysis and drowsiness incident to travelling among the hills, 4,000 feet above the sea. It is not an astringent. It does not shorten life. I have never observed that it dilated the pupils. I have given it with marked benefit in phthisis laryngea."

Dr. Hering published a schema of the general effects of the drug as noted by travellers and from provings. Although a large number of symptoms are given there is nothing especially characteristic of its action beyond what we have already given of its general action. The primary action in the mental sphere is one of excitement or exhilaration, the secondary one of depression and anxiety.

Hyperæmic condition of the brain with vertigo and feeling of fullness and weight.

Dilatation of the pupils with intolerance of light; flickering before the eyes with flying sparks; pains and a sensation of weariness.

Burning and dryness in the throat.

While the desire for food is lessened, as we have seen, under its use and no inconvenience felt therefrom, yet in some of the provers we find complete loss of appetite with aversion to all food, coated tongue; or the appetite is quickly satiated.

Painful gripings with mucous or foamy diarrhoea.

A purgative action is its primary effect, constipation being secondary.

Cough provoked by tickling in the larynx with hoarseness and scanty expectoration.

Increased action of the heart.

Dull or cramp-like pains in the muscles, with irregular tottering gait.

No desire for sleep.

Dr. Searle, in his article, to which we have already referred, in speaking of his uses of the drug, says, in substance, that he had found it of benefit in preventing the discomforts due to loss of sleep when pressed with professional duties; or, if a few moments' sleep were obtained, he awakened from them bright and vigorous instead of with the exhausted feeling usually accompanying such circumstances. He also adds: "It is not a little curious that, while its use disperses the desire and need for sleep, it does not prevent sleep as do coffee and tea."

He mentions several cases in which he has used it with benefit, such as weakness incident to severe uterine hemorrhage, in nervous dyspepsia and asthma, for the exhaustion incident to public lecturing or to the shopping expeditions of ladies. Also for business men when prevented from eating or where they suffer with faintness and hunger if the meal is delayed.

It has been used successfully in cases of sick headache, neuralgia and neurasthenia, in the tedious convalescence from typhoid fever, pneumonia, *et cetera*. Also in those cases where the disease is evidently controlled, but where the vital forces are at a low ebb and there is no reaction, with loss of appetite, or when food is taken it does little or no good.

It is also spoken of as a valuable substitute for and aid in the control of the opium habit, one of the chief advantages being that the substitute produces no craving on its part and can be abandoned at any time. One physician reports that he produced a "foamy" diarrhoea in a patient to whom he was administering hypodermic injections as a substitute for those of morphine. It has also been recommended for the increased tendency to nervous troubles incident to the over-stimulating conditions of our business and social habits, and for many of the dyspeptic and bilious manifestations in those of sedentary habits.

The salts obtained from the coca are the hydrochlorate, acetate, citrate and salicylate. The other substances are, hygrin or hygrina, a volatile alkaloid; a tannin which reacts with a green color to iron salts, called coca-tannin or coca-tannic acid; also eegonine, and a wax. The active principle was discovered by Niemann in 1859. Its formulæ are, $C_{22}H_{20}NO_4$ and $C_{17}H_{21}NO_4$. It is in the form of

small monoclinic prisms and has a bitter taste. It is soluble in alcohol, chloroform and ether. The dose is $\frac{1}{32}$ to $1\frac{1}{2}$ grains.

It is interesting to note that the neutral principles contained in coffee, tea and chocolate, beverages so generally in use, are almost identical in chemical composition, and similar in physiological action, to cocaine; and this fact may lead us to find in either theine, caffeine or theobromine local anæsthetic properties similar to the alkaloid of the coca plant.

Experiments on the physiological action of cocaine and its alkaloids were published by Hughes Bennett (1878) and by Von Anrep (1880). The conclusions arrived at by these experiments we find given in the *Practitioner* of January, 1885, from which we quote: "In small, not fatal, doses, they produce cerebral excitement and partial anæsthesia; in large fatal doses complete anæsthesia; tetanic spasms and death.

They paralyze the entire posterior columns of the spinal cord, and the peripheral sensory nerves, but do not affect the motor tract. They first increase, then impede, and lastly stop the respirations. They at first increase, and finally diminish both the force and frequency of the heart's contractions. They produce at first contraction, and afterwards dilatation of the capillaries and small blood-vessels, with stasis of the blood, indicating first irritation and subsequently paralysis of the vaso-motor nerves. They produce also myosis of the pupil, increased salivation, and tenesmus with a copious mucous discharge from the bowels; at the same time the temperature is at first slightly lowered and then increased. Von Anrep experimented on warm and cold-blooded animals. He found mydriasis to be a constant symptom in warm-blooded animals, after both local and general application of the drug. There was local anæsthesia of the skin after an hypodermic injection, and loss of sensibility and taste after painting a portion of his tongue with a solution of the drug. Sometimes albumen and sugar appeared, but only in animals which had suffered from long-continued cramps and oppressed respiration.

Interesting experiments lately performed on the frog have shown that hypodermic injections of $\frac{1}{16}$ of a grain lessen the number of pulsations of the heart, the beats becoming at the same time irregular and intermittent. If this dose is increased, the force of the heart is very much diminished, the heart itself becoming engorged with blood, and its action labored and irregular, and is finally paralyzed in diastole, first in the ventricle and then in the auricle. If it is applied locally, a drop or two of a four-per-cent. solution, the paralytic action is very rapid, the heart being arrested in systole. The action on the respiratory system is not so marked, although the same

stimulant and depressant action is noticeable; the rapidity depending upon the size of the dose.

Small doses increase the reflex irritability of the spinal cord while, under large doses the reflex is lessened or entirely absent.

Small doses increase the irritability of the sensory nerves, but do not affect the motory filaments; large doses paralyze the sensory and diminish the motor sensitiveness. Tactile reflexes are much diminished.

The vagi are paralyzed, but their inhibitory power is not affected. Muscular excitation is lessened by large doses. Co-ordination is also interfered with after moderate doses. Large doses injected into striated muscular tissue diminish their excitability and the contractions are shorter, slower and more feeble.

Its lethal power is slight, its action is not cumulative, and resembles that of cannabis indica.

An interesting case of poisoning is related where twenty-four grammes of a crystallized substance were extracted from two pounds of coca leaves and taken in a glass of beer, followed later by two drinks of brandy. He was awakened from sleep with gripings of the stomach, burning pains in the palate, dryness of the mouth and throat, dizziness, great weakness of the whole body, perfect consciousness, pulse and temperature normal. One and one-quarter grains of morphia were taken, which produced sleep. No further effects were produced except a suppression of urine for twenty-four hours.

Though it was long known that cocaine lessened the sensibility of the sensory nerves; that it produced mydriasis and dilated the pupils, but very little use was made of it. In September, 1884, however, Dr. Koller, of Vienna, re-awakened an intense interest in this drug by showing its action on the mucous membrane of the eye and its power to produce a marked state of anæsthesia therein. He was led to use it on the eye by observing its effect on the mucous membrane of the larynx.

According to Dr. Squibb, the local anæsthetic action of cocaine is probably a mechanical effect resulting from the contraction of the small vessels of the terminal bulbs of the sensitive nerves.

Dr. Jessop, in the *Practitioner* for January, 1885, gives the result of some personal experiments on the eye. The first experiment was simply to test its anæsthetic properties. In the second a four-per-cent. solution was frequently instilled into the eye and the following results noted: The loss of accommodation lasted three-quarters of an hour.

1. Dilatation of pupils, though acting to light, and to the movements of accommodation.

2. Complete anæsthesia of cornea and conjunctiva in fifteen minutes, the anæsthesia limited to the

conjunctival margin of the lids, any traction of the lashes giving rise to pain.

3. Sensation of heaviness and coldness of eye ball.
4. Slight lachrymation.
5. Paralysis of accommodation.
6. Enlargement of palpebral fissure.
7. Constriction of small peripheral vessels.

The enlargement of the palpebral fissure was due to the drawing up of the upper lid, and to the depression of the lower lid at the outer part, and an increase in the distance from the inner canthus to the punctum, the latter being turned in. The reaction of the orbicularis muscle on the cocainized side was increased.

He next experimented to find out the cause of the dilated pupil, whether it was due to paresis of the third nerve, or irritation of the sympathetic. The results were as follows:

Full atropin-mydriasis became increased by a twenty-per-cent. solution of cocaine, the increase not acting to light or the movements of accommodation; the same was true of homatropin.

A fully cocainized pupil also dilated by atropin, becomes fixed and the paralysis of accommodation is increased.

Eserin constricts a fully cocainized pupil.

Cocaine does not dilate a fully eserinated pupil.

Pilocarpin will not constrict a fully cocainized pupil, but will a moderately dilated one.

Cocaine will not dilate a pupil fully under pilocarpin.

The author concludes, therefore, that it was due to sympathetic irritation.

Dr. W. O. Moore says: this mydriatic effect of cocaine is well marked and will make it a valuable contribution to our list, as ophthalmoscopic examinations can be made, and the inconvenience of atropine not be felt, the effect on the accommodation in the former being of such short duration. The chemical formula of atropia is almost identical with cocaine. The mydriatic effect of the cocaine applied to the eye in man differs from the effect noticed by Dr. Bennett in his experiments, where the drug was given by the stomach in animals, he finding a contracted pupil the rule.

Dr. Da Costa in experimenting with the drug, used hypodermically, gives the following results: No effects were produced until at least eight minims of a four-per-cent. solution were injected; in some instances one-half to one-third of a grain was used. The general sensibility was only slightly altered. The temperature rose, not abruptly, however, from half a degree to a degree and a half, and was maintained for several hours. The effect on the circulation was to render the pulse fuller and stronger, while the number of pulsations may be increased or lessened;

in a few instances no change was noted in the frequency. In the sphygmographic tracing the higher vertical line of ascent, and the more pointed summit, showed increased force of cardiac contraction; while the sudden fall in the line of descent, and a well-marked dirotic wave, indicated rather a lessened than an increased arterial tension. The pupils were speedily dilated, and uncertainty of vision was complained of. Dr. Da Costa, from these hints, suggests its use in many a condition of collapse, of weak heart, or heart failure, as also in low fevers as a cardiac stimulant.

During the past six months the use of cocaine as a local anæsthetic, to mucous membranes, has been very extensive, and many operations have been performed in a painless manner where, formerly, ether or some other anæsthetic had to be used.

Of the eye we may mention, the extractions of foreign bodies, operations for strabismus, iridectomy, cataract, operations on the cornea, conjunctiva and lids, enucleation of the globe—in fact, nearly all the operations on the eye can be done under the anæsthesia produced by cocaine.

It has also been used with good effect on the mucous membranes of the ear, nose and throat.

In regard to its use on the urethra, the general experience shows it to be of value in catheterization, sounding, etc. While the anterior parts of the urethra seem to be the most affected, stronger solutions would probably produce similar results throughout. It is also of service on the glans penis preparatory to cauterizations of patches and ulcers, removing warts, etc. Dr. Frankel used a twenty-per-cent. alcoholic solution on the female genital mucous membrane, and found that the sensibility to pain was markedly diminished, especially in the superficial layers, as also the reflex irritability of the vaginal orifice.

Operations about the cervix uteri have been performed after injecting from three to five minims of a four-per-cent. solution into the tissues. Dr. Polk writes: In general, it may be stated that in the lesser operations, and even in those that require time, when the subject is phlegmatic and endowed with self-control, cocaine will prove satisfactory.

It has also been used in obstetrics and anæsthesia of the cervix produced by it. Injections were found more serviceable than the painting of the surface.

Injections into the vaginal walls during the second stage enabled the head to pass with very little discomfort. Dr. Le Fevre, of Bellevue Hospital, who experimented with this drug, found an eroded and sensitive os as the cause of persistent nausea and vomiting in a case of pregnancy; painting the surface with a four-per-cent. solution gave entire relief. It has also been found of decided benefit in cases of nursing women who had painful and eroded nipples.

CLINIQUE.

TREATMENT OF HYSTERIA.*

HYSTERIA is a disease of the class neurosis, almost exclusively confined to the female sex, and characterized by a multiplicity of affections of which the most significant are an excessive impressionability, the hysteric globus, analgesias, hyperæsthesias, paralyses and convulsions.

We shall give the treatment of the common form, of the convulsive form, of the grave form, and of hysteric affections of which the treatment has not been indicated under any of the forms of the disease.

I. PROPHYLAXIS.

Education and hygiene are the two means which enable us to combat the hysteric disposition, hereditary or innate. Education should avoid the development of the affective element and of the imagination. It should therefore proscribe frivolous and sentimental reading, performances, nocturnal festivities, and should have an eye upon the female companions and friends of the child predisposed to hysteria. Gymnastics, cold baths, life in the country, abundant nourishment, abstinence from coffee and tea contribute in a great measure to combat the hysteric disposition.

We believe to have solved, in our *Éléments de Médecine Pratique*, the question of marriage, and we give the following résumé: Marriage is useful for hysterics when it brings on calming of the genital organs; it is injurious when it becomes a cause of superexcitation, and especially superexcitation with imperfect satisfaction.

II. TREATMENT OF THE COMMON FORM.

Ignatia, tarentula, conium and platina are the four principal medicaments of hysteria; valerian, asa-fœtida and bromide of potassium have also special indications.

1. *Ignatia*.—This medicament is recommended by all authors; it is indicated by an excessive impressionability, by mild melancholy, with weepings, sighs, tremor of limbs; constriction of the throat; compressive pain of the forehead and root of the nose. We shall return to this medicine in the treatment of several hysteric affections, such as neuralgias, gas-tralgias, and impulses of anxiety.

2. *Tarentula*.—This medicament is a new one in therapeutics; but, thanks to the works of Nuñez and of Perry, its indications are very precise, and I have very often had to verify its efficacy in the treatment of hysteria. Like ignatia, it is indicated by involuntary weepings, by laughter alternating with tears, by a need of incessant movement and the impossibility

to remain in the same place. But the weepings of tarentula are not accompanied with that mild sadness and melancholy proper to ignatia, but rather by precordial anxiety with fear. Besides, tarentula has for its special characteristic the exaltation of the genital sense, precordial heat with coldness of the feet, periodicity of its sufferings.

3. *Conium Maculatum*.—Like most of the medicines employed in the treatment of hysteria, conium acts upon the genital system, but here the lascivious excitation exists especially in the imagination, and is often accompanied by a real impotency.

The great hemlock is suitable to persons very much exhausted, emaciated with commencing consumption. The anterior venereal excess is one of its indications, and Hahnemann adds the opposite condition, absolute continence. The sadness which indicates conium is accompanied by indifference and bad humor. It is, therefore, very different from the sadness of ignatia. Low spirits with involuntary laughter, apparent weakness of the intellectual faculties, diminution of memory, menses feeble and retarded, specialize the choice of conium maculatum.

4. *Platina*.—This medicament has many relations with ignatia. It is the principal medicament of hysterical melancholy with anxious disposition. The weepings of platina are more accompanied by anguish than those of ignatia. This medicament produces a veritable venereal exaltation both in men and women. In the latter the courses are too strong, even to the extent of menorrhagia. The hysteric convulsions and spasms are in the domain of platina, and we shall again meet this medicament in the treatment of those affections. The globus hystericus; the cephalalgias augmenting and diminishing gradually, the alternation of moral and physical symptoms complete the specialization of platina.

5. *Valerian*.—We very little employ this medicament, because the others are usually sufficient. The indications of valerian are: pains, sudden and coming on by fits; pains disappear by change of place, as in ignatia; sudden cephalalgia; insomnia; but principally joyous and trembling superexcitation as from coffee.

6. *Asa-fœtida*.—The pathogenesis of this medicament justifies its traditional employment in the treatment of hysteria: hysteric sadness and anguish with indifference; globus hystericus; tympanites; dyspnea and palpitations; cramps of the bladder; excitation of the venereal appetite; menses too soon.

7. *Kali bromidum*.—We should say a word on the bromide of potassium, so commonly prescribed by the old school in the treatment of all nervous affections. This medicament which, in large doses, produces anaesthesia of the pharynx and loss of reflex nausea, symptom proper to confirmed hysteria, brings on in

* Abstracted from Dr. P. Jousset in *L'Art Médical* for September and October, 1884.

others a diminution of the venereal desires, and enfeebles, by its prolonged usage, muscular contraction and vivacity of intelligence. Such are the symptoms which serve to precionize the indications of this medicine in the treatment of hysteria.

8. *Metalloscopy and Metallo-therapy.*—These methods, due to Dr. Burq and welcomed by our school in 1851, have been popularized by Charcot. Whenever there exists a hemi-anæsthesia, recognizable by pricking or by the thermometer invented by Burq, it is possible to find a metal which causes the sensibility to return and the temperature to go up, and this metal is usually indicated in the treatment of hysteria.

We enter into some detail: A certain number of hysteric patients present, on one side of the body, usually the left, an analgesia more or less marked. This analgesia is accompanied by a notable diminution of temperature and of muscular force of the same side.

Metalloscopy consists in finding which is the metal which can cause the disappearance of the analgesia.

It is thus that we are to proceed: We apply successively upon the analgesic skin plates of various metals, and keep them there at least ten minutes. At the end of this time, if it is the metal which is suitable to the particular case, the patient experiences a marked amount of heat under the plate, the skin becomes red and very sensible to prickings.

The thermometer invented by Burq is more decisive, because it indicates the most delicate shades, and because it does not permit of any deceit. It is a surface thermometer, which has a groove destined to receive the metal to be proved. After having taken the temperatures of the two sides of the body, we successively try the metals and note which of them causes the temperature to rise up in the analgesic side. This trial is long and minute; it demands several sittings; hence it will never come easily into practice. Nevertheless, in rebellious cases of hysteria and when the process of pricking does not give very distinct results, we should advise not to neglect the examination by the thermometer, to which we owe some precise therapeutic indications.

Metallotherapy.—Formerly, when one had found the metal which destroys analgesia, one applied it in large plates upon the skin of the hysteric patient, and obtained by this means veritable cures, cures which were attributed by the free-thinkers in therapeutics to an electric action in small doses.

This false interpretation of medicinal action from a truly infinitesimal dose has been overthrown by the simple fact that electricity, which causes the analgesia to disappear, does not cure the hysteria.

Dr. Burq has, on his part, instituted experiments which have demonstrated that there is no electric

action from the application of the plates. In fact, and this argument is decisive, the metal which destroys the anæsthesia by its application upon the skin, cures or considerably ameliorates hysteria when administered in small doses.

Those which have been most frequently employed either by Burq or by ourselves, are copper, brass, gold, platina, zinc and lead. Now, all these metals contain, in their pathogeneses the principal symptoms of hysteria.

To resume: Metalloscopy is a very useful process in the numerous cases of hysteria which prove rebellious to therapeutics, and when this method clearly indicates one or more metals, we certainly derive a great advantage by their administration in minute doses. Unfortunately, notwithstanding the processes of Dr. Burq, so varied and ingenious, the indications of metalloscopy are often uncertain. In these cases, it is probably to the medicaments of the vegetable or animal kingdom that we ought to address ourselves.

We shall now examine some means which are all external remedies, in fact, electricity, hydrotherapy, mineral waters and voyages and travels.

9. *Electricity.*—In these latter days they have extolled static electricity. Dr. Cretin has obtained from it incontestable success. I am able to state with certainty that this medicine is far from being efficacious in all cases. Its happy results cannot be expected before a very long time passes. Even from the avowal of its partisans static electricity, like hydrotherapy, ought to be continued for several months. Faradization advantageously combats hysterical pains and analgesias. This application of electricity has rendered further service in hysteric paralyses.

10. *Hydrotherapy.*—Hydrotherapy, with bromide of potassium, constitutes all the treatment of nervous diseases, according to some observers. I need not say that hydrotherapy does not cure all hysteric patients. A certain number cannot tolerate this remedy, whatever may be the skill of the physicians who apply it; a great repugnance to it and either an absolute absence of reaction or an imperfect reaction are the plain objections to its application. The patients who benefit the most from hydrotherapy are those who have been exhausted by the disease. The action of cold water raises the vital forces, augments the appetite and promotes the activity of the functions of organic life, at the same time that it diminishes the excessive impressionability of the animal functions. All hysteric patients who can well bear cold water derive from it veritable amelioration. It is, therefore, a very precious adjuvant; it is only exceptionally that it effects a cure, and that only after its use for months and years. For very susceptible patients, who can ill bear cold water, the

method of Beni-Barde, which consists in the employment wisely combined of hot and cold water, ought to be adopted. But in patients who accept cold water well and in whom the reaction is easy, water very cold, the energetic douche of very short duration, gives the most rapid and complete results.

11. *Mineral Waters.*—The mineral waters unite in special action hydrotherapy and always the favorable influence of voyages and travels. The waters of Ragata, of Wildbad and of Gastein are those which are most frequently indicated. Their baths calm the excessive nervous excitability, at the same time that they fortify the muscular system, ameliorate and cure the hysteric paralyses. The cephalalgias and the psychic troubles are also happily modified by these thermal waters. St. Sauveur and Ussat, especially, are more suitable when an uterine affection complicates hysteria. Plombières, Luxeuil and Royat are the waters for those hysterics who suffer from the stomach and from chlorosis more or less pronounced. Nérès is especially indicated against hysteric arthritic affections. The hyperæsthesias are also happily modified at this station.

Sea baths act in a hydropathic manner, and have a favorable influence upon hysterics who can bear baths of long duration from ten to twenty minutes, but it is necessary to know that residence at the sea-shore and the baths often excites and augments all the accidents.

12. *Voyages and Travels.*—Voyages and travels always do good to hysterics. They form the only measures which succeed often and rapidly in hysteric alienation and melancholy. I have known patients who consented to start only with a determination to throw themselves into the glaciers of Switzerland, cured by stepping into the railway carriage.

Independently of their favorable action upon psychic troubles, voyages and travels and residence in high altitudes have a happy influence upon the general state of the hysteric patients. They constitute, like hydrotherapy, an adjuvant medication of great importance.

III. TREATMENT OF THE CONVULSIVE FORM.

A. *Ordinary Convulsive Form.*—The treatment of this form is the same as that of the common form. We give here only the treatment of the convulsions.

For the convulsive attack we have three medications of which the action almost instantaneous suits perfectly the symptoms ordinarily short lived. These are, ether, chloroform and musk. Then follow animal magnetism and forcible introduction of cold water in the throat.

1. *Ether.*—This is a universally employed medication, and is almost always efficacious. It is administered in the form of inhalation. If the patient can

swallow, we can administer a few drops of ether in sugar, or a spoonful of syrup of ether.

2. *Chloroform.*—This medicament, of which the pathogenesis reproduces sufficiently well an attack of convulsive hysteria, is an excellent remedy. It is more energetic than ether; we can, therefore, scarcely leave it in the hands of laymen, unless it be to pour 20 drops in 200 grammes of water, of which a dessert spoonful is to be taken, after shaking the bottle, every five minutes.

3. *Moschus.*—Richard Hughes affirms that attacks of hysteric convulsion yield surely and rapidly to the third decimal trituration of moschus, administered dry upon the tongue, in small doses of one to two centigrammes. We can confirm this assertion of Richard Hughes; and we shall add that when there is spasm of the glottis or of the diaphragm, there is no medicine which can replace musk.

4. *Animal Magnetism.*—This is what Briquet has called fascination. This means acts very powerfully and favorably upon convulsive fits, provided that it is administered in a feeble dose. But the prejudices that exist for and against animal magnetism are an obstacle to its extension in practice.

5. *Cold Water.*—The forced ingurgitation of cold water has a real efficacy. Récamier administered the forced ingurgitation of a litre of cold water; it is done by means of a funnel. I call this medication torture by water, because it is extremely painful.

B. *Treatment of Hystero-epilepsy.* The means we have indicated in the preceding paragraph are still indicated here during the convulsive fits. But we ought to indicate the treatment in the intervals between the fits.

Calcareo carbonica, causticum, cuprum, ignatia, nux vomica, cocculus, the solanaceæ, and tarentula, are indicated in the treatment of this form of hysteria.

1. *Calcareo carbonica.*—This medicament has been traditionally prescribed against convulsive diseases; nevertheless its pathogenesis does not contain any symptom of convulsion; its indication is, therefore, principally empirical; it is indicated in the scrofulous by an excessive sadness with weepings and nervous trembling; alternation of gaiety and sadness; impulses of passion.

2. *Causticum.*—The convulsions of causticum are clonic, returning in paroxysms, with or without total loss of consciousness; they have not the rapidity of invasion of epileptic attacks. The convulsions may be followed by paralysis more or less complete with trembling.

Causticum is indicated in convulsive hysteria, when there exist at the same time morbid impulsions, such as anxious impulsion of sadness with such exaltation of sensibility that tears come on from the slightest

cause. Agitation with sweat, anxiety, nocturnal weeping, despair to the extent of suicide. Impulsion to quarrelsome passion.

3. *Cuprum*.—We shall see that copper is one of the principal medicaments of epilepsy; it is therefore indicated in the treatment of this variety of convulsive hysteria, which we have called hystero-epilepsy. Tonic convulsions, then clonic convulsions with foam at the mouth; return of consciousness some time before the patient can open her eyes and speak.

When hysteria presents, at the same time, fits of indifference with stupor, spasmodic laughter, exaltation and fits of ecstasy, cuprum is more particularly indicated.

4. *Ignatia and Nux Vomica*.—We have already said that ignatia is the principal medicament of hysteria. It is indicated, as well as nux vomica, in convulsive hysteria, when the convulsions resemble tetanus more than epilepsy; when they are not accompanied with loss of consciousness, and when they are excited by touch, by movement, and by the least noise.

Nux vomica ought to be preferred to ignatia when the anxiety is excessive, and the violence easily goes to furor with impulse to strike and to speak obscene words.

4 bis. *Cocculus* produces epileptiform convulsions with unintelligible cries. The paroxysm is violent with foam at the mouth, involuntary urine, and is followed by mental alienation, furor, sighs. The paroxysm is preceded by a sensation of intoxication with staring look.

5. *Solanaceae*.—Belladonna, stramonium and hyoscyamus are indicated by epileptiform convulsions. The convulsions of belladonna are excited by sound and light; those of stramonium by touch; but hyoscyamus is more often suitable in hysteria, and we shall find this medicine again in the treatment of ataxy, catalepsy and lethargy.

6. *Tarentula*.—This medicament has cured some cases of hystero-epilepsy; it is suitable when the convulsions are rhythmic, or when they are confined to a single member.

IV. TREATMENT OF THE GRAVE FORM.

Febrile Variety.—The clinical study of this variety is very little advanced. We have, therefore, very little to say about its treatment. Cold lotions, prolonged baths of 28 to 30 degrees, according to the impressionability of the patient; drives in the open air if the patient can be carried; and as much nourishment as she will consent to take and as she can digest. The principal medicaments are aconitum, ignatia, tarentula and chininum sulphuricum.

1. *Aconitum*.—This medicament is very suitable to hysterics. It contains in its pathogenesis: an exces-

sive impressionability; a great mobility of temper; instability of ideas and habitual excitement. The delirium is rarely continuous; it is accompanied by excitement and impulsion to furor. This medicament possesses also the phenomena of somnambulism and double vision.

When the febrile movement is characterized by an alternation of heat and cold, by flushes of heat, by redness of one cheek and pallor of the other, or even by paleness of the face with small pulse, and by abundant flow of urine, aconite will be indicated.

2. *Ignatia and Nux Vomica*.—The febrile movement produced by these two are very much alike. Fever without thirst, redness and heat of the face with anxiety. The chill of ignatia is relieved by external warmth; that of nux vomica is not modified by this circumstance. It is more violent, with shivering, lividity of the hands and nails.

3. *Tarentula*.—The febrile movement of tarentula is intermittent; it is, therefore, in these cases that it ought to be administered. The only characteristic of tarentula is persistent coldness of the feet during the hot stage.

4. *Chininum Sulphuricum*.—One ought not to hesitate to prescribe sulphate of quinine in large doses when the febrile movement becomes intermittent and when it resists tarentula.

TWO CASES OF TETANUS CURED BY THEBAINE.

BY H. C. FROST, M.D., BUFFALO, N. Y.

IN presenting a drug for consideration, or rather for future consideration, I am not very well fortified with provings or cases to support me in the stand which I take.

Perhaps I cannot better elaborate its supposed virtues in that very fatal disease, tetanus, than by relating, briefly, how I came to use it.

Previous to the year 1881, I had three cases of tetanus, all of which were fatal. On the Fourth of July of that year, a boy, nine years of age, was brought to my office, with a small, lacerated wound in the palm of the hand, caused by the explosion of an over-charged pistol. I cleansed and dressed the wound after my usual method and sent him home. I think he reported at my office every day to have it dressed, until the ninth of the month, on which day word was sent to me to call at the house. When I visited the boy I found him suffering with symptoms of trismus, soreness and stiffness of the muscles of the jaws and neck; there had been no spasms of the muscles, but from former experience and the history of the case, I feared that I had the old enemy to contend with. The symptoms gradually grew worse for the next three days. I had been using aconite, bell-

adonna and strychnia. The jaws were locked and the muscles of the back were becoming implicated, and if I remember right, those of the abdomen.

Some years before I had read, in some work, about a series of experiments made upon rabbits and dogs with strychnia and thebaine, and, at the time, was struck with the similarity in action of the thebaine to the symptoms of tetanus, and resolved to try it if ever another case presented itself.

I had procured a few grains of the drug and run it up to the twelfth decimal, triturating the first six and afterwards converting them into liquids. On the 13th of July I commenced to use the thebaine, 8x, dropping a few minims of the liquid every fifteen minutes between the teeth, which, fortunately, were irregular enough to allow it to pass into the mouth. This continued for about six hours, without any apparent effect, when I injected, with the hypodermic syringe, six doses of the 10x at intervals of half an hour, still continuing the dose by the mouth.

That evening when I saw the patient, some 12 hours after commencing the medicine, there were positive indications of amelioration of the symptoms. The progress of the case, from there out, was toward a cure, and in a week's time he was convalescing.

From this case, I was convinced that either this was one of those cases that would recover in spite of the doctors, or that thebaine was a specific for some cases of the disease.

This you may call an empirical case. But now I have another, which will surely fortify the law in the first case, unless it be one of those strange and rare coincidences.

My second case occurred last summer, 1884. A lad, eighteen years of age, who was handling hard wood lumber, ran a large sliver, over an inch in length, into the palm at the base of the middle finger; a fellow-workman, after much trouble, extracted it. He continued at his work that day, but the next remained at home, it having become very painful. It was poulticed with soap and sugar until I was called, on the seventh or eighth day after the injury. When I saw him, the muscles of the face and neck were set; it was impossible to open the jaws. There was a flabby puffiness of the hand at the seat of the injury. This I opened by a free incision, letting out a little watery pus. I searched thoroughly for portions of the wood, but found none; allowed the wound to remain open, applied a flaxseed poultice, and commenced the use of the thebaine, in about the same doses as I had in the other case. It was about thirty hours after commencing the use of the drug before we saw signs of improvement, but from that time on his improvement was steady and sure. The thebaine was continued for nine days; as he grew better the intervals between the doses were prolonged.

Two cases, I am well aware, are not sufficient to prove the drug a specific for this disease. But the history of its use in these cases is sufficient to warrant a thorough trial in other cases.

I am not aware of the drug having been used before in medicine. It is one of the six alkaloids contained in opium, and of the six it is contained in the least quantities, and its poisonous properties are the most violent.

I have recently obtained a small quantity of the pure drug manufactured by Merek, of Darmstadt, which I have carefully prepared for use.

POTASSIUM SULPHATE.

By HENRY R. STILES, A.M., M.D., NEW YORK CITY.

AMONG the different forms of potassium used for medicinal purposes, we have sometimes thought that the salt known as potassium sulphate was the most neglected. Schüssler, however, in his system of "Tissue Remedies," has given it a fair position; and those who have used it, according to his suggestions, have acquired a decided respect for it, despite Dr. Richard Hughes' rather slighting remark (*Manual of Pharmacodynamics*) that "Dr. Schüssler's structure seems to me much founded on guess work."

It is true that this salt figures much less in general use than its compeers, potassium phosphate and potassium chloride, but it is, in practice, a most willing cousin to them, often helping to a cure when they have failed, or have only partially succeeded.

Aside from guides to its use, derived from the secretions, which are always characteristically slimy, yellow and sticky, we have this distinctive "key-note," that the ailments which it covers *are worse in the evening, or in a warm room.*

In those especially trying cases of rheumatoid or neuralgic character, where there is a nocturnal aggravation, not only is the aggravation relieved, but the disease itself is markedly relieved, or cured, by its use.

Take, for example the following cases:

CASE I.—*May 14*, was consulted by a very intelligent gentleman, a journalist, for a rheumatic affection of the right wrist. There was no swelling, discoloration, or tenderness of the part; and, generally, little or no pain in the day-time, but at night there was a severe aching in the wrist, which gave him no peace. In whatever position the arm was placed no relief could be obtained. His general health was excellent, but this night ache was wearing on him, and had resisted several weeks' treatment by other physicians. I prescribed potassium sulph. 3; and on the 17th heard from the patient, by note dated 16th, "I am happy to report that the pain and trouble in my wrist has almost wholly disappeared."

CASE II.—April 16, received a letter from a man in North Carolina, who wrote with some anxiety concerning his case. A severe cold taken in the previous October from a draught blowing upon him in a sleeping car was followed, about December 1, with an attack of rheumatism (inflammatory) the force of which fell mostly on the right side, and especially upon the hip and leg of that side, leaving him, at date of his application to us (five months later), much debilitated, and with a "soreness in the small part of his back," etc., and which troubled him in the mornings, with such suffering as to prevent further sleep. I prescribed potassium phosphate and calcaria phosphate.

Two weeks later (May 2d) he wrote that, while the lameness of leg and foot was a little better, yet "the back does not improve." But, he added, "I scarcely feel the soreness in the small part of my back in the day time; but *am very sore about three o'clock in the morning until day.*" This called my attention more directly to this feature of night-aggravation than his previous statement had done, and I sent him potassium sulphate 3, and calcaria phosphate (the latter, as I had done in the previous prescription, on account of his weakness, and of the wandering, shifting pains through his body).

May 17, I heard from him as follows: "I am glad to inform you that I am improving under your treatment. *My back is better than it has been in six months.* I think your last medicine is acting like a charm on my back."

I am aware that "one swallow don't make a summer," but I have only presented these two cases, as being the most recent of many which I have had, wherein the use of potassium sulphate, according to this indication of nocturnal aggravation, has brought the happiest results.

A CASE OF DYSTOCIA.

By LESTER M. PRATT, M.D., ALBANY, N. Y.

OUR literature of the present day contains a great deal of good practical advice on the management and treatment of lying-in patients, and how best to terminate cases of labor successfully where but little skill, or interference on the part of the accoucheur is demanded, and when, if left to nature, nine-tenths of them would complete the delivery without assistance of more than an ordinary nurse.

Having had an experience of thirty years in the practice of medicine, and having had, it is fair to assume, a pretty large number of obstetric cases, I am safe in saying, I have encountered almost every possible abnormal presentation of the fetus; also of the placenta, both partial and complete, as well as of the funis; and in every case the mother has been

saved, when both lives were in jeopardy, owing, perhaps, to circumstances rather than superior skill in their management. In either case the accoucheur is entitled to some credit, in view of the danger attending parturition in cases of dystocia which require the use of instruments of any sort.

The case to which I purpose to give attention came into my hands a few years since; I consider it of sufficient importance and interest to make it worthy of prominence as a case of dystocia seldom met with, even in the experience of the oldest and most distinguished in the profession, and which came under the observation of five other physicians, all of whom admitted it was the most difficult case of childbirth to which they had ever been called to assist.

Instrumental deliveries in obstetric surgery are not of rare occurrence, and a resort to the forceps in cases of dystocia, from any cause, is not infrequent, but is often of great advantage in assisting to shorten labor, and mitigate suffering when the case demands their use; and there are often other conditions which would require a resort to more hazardous means, when the accoucheur would be warranted in resorting to the dreadful expedient of plunging an instrument into the skull of a human being, and the unborn life of a child is sacrificed to save that of the mother.

In cases of dystocia, when the forceps have failed to deliver after a faithful trial, the physician, after careful and deliberate study of the case, and with a perfect understanding of the difficulties involved, which, in his opinion, render it impossible for a living child to be born, must now decide the question after having exhausted every means to overcome the difficulty, of resorting to the only alternative left him, however repugnant to his nature the operation of craniotomy may appear to him.

The case under consideration was a primipara, at full term of pregnancy, married, of American parentage, medium height, well-formed, and had always enjoyed good health, never having met with any accident, aged twenty-five.

I was called to attend her in August, 1875, when I found her in the first stage of labor, with strength and courage apparently equal to any emergency, as the sequel will prove to have been the case; the os dilating, and, after a few hours had elapsed, the membranes were ruptured, when the position of the foetal head was readily ascertained to be natural, and descending slowly till it reached the brim of the pelvis, where it became impacted, and remained so for several hours without scarcely any progress, although subjected to strong and expulsive pains.

At this stage of the labor, my suspicions were aroused to the probability of at least a serious case of dystocia, and I was pretty confident, from the length

of time the head had become impacted, and no descent whatever from the violent uterine contractions, that the parturient canal was inadequate to allow the passage of an ordinary-sized head to escape without the aid of forceps. I could not satisfy myself that the conjugate diameter of the pelvis measured more than *three* inches—if so, I considered it impossible for the child to be expelled without resorting to the forceps.

In view of these complications, and the undoubted necessity of completing the labor instrumentally, I called to my assistance an eminent accoucheur of great skill and large experience in midwifery, when he decided that delivery could not be effected without the aid of instruments, as the pains had almost entirely subsided, but her strength and courage still good; when he proceeded to introduce a pair of "Baudelocque" long forceps, which were adjusted with considerable difficulty.

After making traction to the full extent of his strength and endurance, without overcoming the resistance in the least—or was it, with our united strength, put upon the forceps, until both were exhausted?—they were removed, and the head was found still firmly impacted as before the forceps were applied.

It seemed now as though we had arrived at a critical moment, when we must decide the question of delivery by sacrificing the life of the child, if it was living, by a resort to the operation of ovariotomy, as the only alternative to save that of the mother.

In view of what we had encountered and failed to overcome—an impacted head, a contracted pelvis, the symphysis pubis depressed and not yielding to pressure, the head large, compression having no effect to diminish its size—the perforation of the skull and extracting a mutilated child was our only refuge.

This operation having been, with great care and skill, successfully performed, and without resort to an anæsthetic, the delivery was effected in a short time by readjusting the forceps, when an unusual amount of strength was required to bring down the head, and nearly as much to deliver the shoulders, which proved beyond a doubt, the impossibility that a full grown and well-developed child could have been born without sacrificing its life.

Such was the opinion of my counsel, who also acknowledged, that in all his experience in midwifery, of more than thirty years' practice, having attended at least a thousand cases of confinement, *this* was the most difficult he had ever been called to assist in consultation or otherwise; and at the time advised, should the patient ever become pregnant again, a premature delivery at the sixth or seventh month should be effected, as she never could be delivered of

a living child at full term. Our patient was in labor about eighteen hours, and never for one moment relaxed her courage, or expressed any fears that she should not live through the operation to which she cheerfully submitted, never uttering one complaint from first to the last. The child was large, weighing over ten pounds, showing there was a disproportion between the child and the parturient canal too great to allow of its being born alive, or without mutilation.

But I have still more to relate in regard to this case: About one year after her confinement she became pregnant for the second time, and, unfortunately, was allowed to go on to full term.

My worthy friend and coadjutor, in the meantime, while riding in his carriage attending to his professional duties, was taken very suddenly ill, when he soon became unconscious, was taken to his office, where in a few moments he died from what was supposed an attack of angina pectoris. His death was mourned by a large circle of patrons and friends, and the loss to the profession, of which he was a most honored member, as well as distinguished for his skill in midwifery, has yet to be made up.

The doctor had at some time expressed a somewhat equivocal opinion which had reached the ear of our patient, that should she become pregnant again there was a probability she would go through all right; and when I suggested the necessity of effecting a premature birth at six or seven months, she objected, and preferred to take the chances in the hope of having a living child at full term, rather than rely upon the uncertainty of one born prematurely.

In the latter part of May, 1877, just about one year and nine months after her first confinement I was called to attend her about ten o'clock in the forenoon, when I found her, as before, in the first stage of labor, with indications as favorable as could be desired. After remaining at the bedside awhile, I took my leave for a few hours, and when I returned found the head presented through the os, the membrane having ruptured, and the head firmly lodged under the symphysis pubis, as it was in her previous confinement. I readily concluded the conditions were in all respects precisely the same at that stage of the labor as before, and would require very much the same management.

The death of Dr. Quackenboss, my former counsel, left me to rely upon the assistance of those of less experience and far less ability to aid me in this most hazardous, if not barbarous undertaking, and which I had hoped never to encounter again. It was late at night when I requested counsel, and a young physician responded who had some reputation for skill in obstetric practice, and as having made it a specialty. I related to my counsel the facts in regard to

the previous accouchement and the means employed to deliver the child, and the conditions at that time involved which required the operation of *craniotomy*. He readily coincided in our diagnosis, and that the same would apply to the present case; giving it as his opinion that delivery could not be effected without resorting to the same expedient.

He proceeded, however, to make the attempt to deliver by the forceps; but failed to accomplish the object, or bring the head down in the slightest.

We then proceeded to perforate the skull and dislodge the contents, when we found too large a portion had been broken down, which made it difficult to apply the forceps in consequence of irregular, jagged edges of bone, making it necessary to use the *crotchet* and *blunt* hook, both of which failed to extract the head, after a faithful trial. At this stage and condition of the case, another physician was summoned to our aid, who, after vainly exhausting his skill in the attempt to deliver, gave it as his opinion that the only hope of saving the life of either mother or child, was the *Cæsarean* operation, to which we did not assent; when we decided to let the patient rest, and to be kept perfectly quiet from that hour, then six in the morning, till ten o'clock when we left her in good strength, although it had been taxed to its utmost limit and endurance. In the meantime we availed ourselves of the assistance of a physician who possessed a pair of craniotomy or crushing forceps, and who brought with him two others, making in all six in consultation.

The patient was now for the first time put under the effects of ether and placed upon a table opposite the window, when the instrument was applied, and with the aid of the entire staff of six physicians (and there seemed none too many) the child was delivered, and the patient placed in bed, where she very soon regained her consciousness, but not greatly exhausted or weak, or attended with more than an ordinary loss of blood.

I have seldom attended a case of ordinary child-birth which had a better or more speedy recovery, having escaped what so frequently follows such difficult labors, laceration of the perinæum, but in consequence of protracted pressure of the impacted head under the arch of the pubis producing, I suppose, atony of the bladder and urethra, resulting in incontinence of urine, from which she has suffered more or less up to the present time. Remedies having failed to reach the case, the patient is obliged to wear a compress, greatly to her discomfort, but fortunately has escaped pregnancy.

VACCINATION AND SKIN DISEASES.—"Whenever or wherever there is any danger from small-pox, do not hesitate to vaccinate, whether any disease of the skin be present or not; the skin disease will not be aggravated, but more probably benefited, by the operation."—DR. MOULINET.

SOME INDICATIONS FOR THE USE OF MEDICATED TABLETS.

Aletrin is prepared in the $\frac{1}{16}$ to $\frac{1}{8}$ trituration, and will be found of service in passive hemorrhages, with atony of the muscular system.

Alumina is furnished in the $\frac{1}{16}$ to $\frac{1}{8}$ trituration. It is indicated in great dryness of the mucous membrane in general, and is frequently of service in obstinate constipation, when great straining is required to pass even a soft stool, and when the urine can only be voided by straining at stool. It will also be found of use in catarrhal states where the secretion is profuse and transparent. Extreme prostration, particularly after menstruation, is quite characteristic.

Ailanthus glandulosa comes in 1 minim doses, and acts especially upon the skin and mucous membranes. The catarrhal secretions are excoriating, the nose and upper lip becoming covered with thick scabs.

In scarlatina maligna, with livid color of the skin, tongue thickly coated white, brown in the middle, or dry and cracked, throat livid, swollen, fetid discharge, it has been used with great benefit.

Ammoniac gum, $\frac{1}{16}$ to $\frac{1}{8}$, is used in cases of bronchitis, in which there is excessive secretion, difficult expectoration and no fever.

Ammon. benz., $\frac{1}{16}$ to $\frac{1}{8}$, is used chiefly in chronic gout and in cases of gravel.

Ammon. bromide, $\frac{1}{16}$ to $\frac{1}{8}$, is sedative in congestion at the base of the brain, especially when accompanied with a peculiar spasmodic cough resembling whooping-cough, worse when lying down at night, the expectoration, when present, being tough and stringy. In anemia of the brain, it must be individualized from the other bromides. When indicated, it promptly relieves the spasm of the blood vessels, produced through the sympathetic and the vaso-motor nerves.

Ammon. carb., $\frac{1}{16}$ to $\frac{1}{8}$, is an active heart stimulant, and is of service in impending collapse, oppressed breathing, prostration, general flabbiness of tissues and copious hemorrhage.

Ammon. iod., $\frac{1}{16}$ to $\frac{1}{8}$, is used in psoriasis, tinea capitis, and other scaly affections of the skin, particularly those due to a syphilitic infection and for enlarged glands, especially indurated tonsils.

Ammon. mur., $\frac{1}{16}$ to $\frac{1}{8}$, has been used with benefit in menorrhagia in cases in which the flow was only at night. The catarrhal secretions are tenacious and transparent. In constipation, when the stools are hard and crumbling and difficult of expulsion.

Ammon. phosphat., $\frac{1}{16}$ to $\frac{1}{8}$, has been found serviceable in cases of diabetes, and will pretty surely diminish the quantity of sugar in these cases.

Ampelopsin, $\frac{1}{16}$ to $\frac{1}{8}$, is claimed to have cured obstinate cases of dropsy, and its action is said to be chiefly upon the glandular system. It is reported to have restored the secretion of milk in a weak, tearful lying-in woman.

Antimon. crud., $\frac{1}{16}$ to $\frac{1}{8}$, acts especially upon the mucous membranes, and is characterized by milk-white coating of the tongue, slow digestion, nausea, desire for acids, which disagree, alternate constipation and diarrhoea. It is especially useful in complaints after cold bathing, and for horny excrescences upon the skin, particularly the soles of the feet.

Antimon. tart., $\frac{1}{16}$ to $\frac{1}{8}$, is of the greatest service in all pulmonary affections which are characterized by rattling of mucus which cannot be expectorated, particularly when there is nausea, cold perspiration, prostration, aggravated at night. In lumbago aggravated greatly by motion and in the pustular stage of small-pox. This drug will be found of service in a great variety of affections where the chest and stomach symptoms call for its use.

Apis mel., $\frac{1}{16}$ to $\frac{1}{8}$, is used in dropsy from any cause, when there is little or no thirst, urine scanty, and the pains are of a stinging character. The remedy will be found useful in a variety of affections in which there is oedema, no thirst, and scanty urine, diphtheria, scarlatina, erysipelas, etc.

Apocynin, $\frac{1}{16}$ to $\frac{1}{8}$, in dropsies with scanty, dark-colored urine, sinking sensation at the pit of the stomach, bruised feeling in the abdomen, great thirst but water disagrees, constipation, drowsiness and weak pulse.

Apomorphia mur., $\frac{1}{16}$ to $\frac{1}{8}$, in vomiting from cerebral irritation, where the nausea is constant, there is loathing of food, tongue coated white, intense prostration. It is claimed to be of service in sea-sickness.

Argent. met., $\frac{1}{16}$ to $\frac{1}{8}$, is especially useful in constipation where the stools are like sand, in fetid ulcerations of the os uteri, in metrorrhagia with violent pains increased by motion, and great weariness with all complaints.

Arsenicum alb., $\frac{1}{16}$ to $\frac{1}{8}$, is indicated in a great variety of morbid conditions in which there is rapid and excessive prostration, emaciation, anguish and restlessness. Periodicity is a marked characteristic of this remedy,—as all symptoms are aggravated just after midnight,—as is also burning dryness of the affected tissues, with constant desire to moisten the mouth and throat.

Asclepias tub., 1 to 2 minims, has been used largely in pleurisy, pleurodynia and in rheumatism where the pains are stitch-like, aggravated by motion and subsides when sweating occurs, very much like bryonia.

Aurum met., $\frac{1}{16}$ to $\frac{1}{8}$, is a deep-acting medicine, profoundly affecting the glandular and osseous systems particularly. The most prominent symptom which calls for its use is the profound melancholy with tendency to suicide, and the great sensitiveness of the body to cold. It should be thought of in scrofulous and syphilitic affections, also after the abuse of mercury, but the mental symptom is the key to its selection.

AN AUTOPSY, SHOWING CURIOUS RELATIONSHIPS BETWEEN THE ABDOMINAL VISCERA, DIVERTICULA OF THE RECTUM, ETC.

By W. STORM WHITE, M.D.

Mrs. S., *et.* 70, *obit* April 17th, autopsy on the same day. Emaciation and rigor mortis marked. Tumor in the right natal region, immediately over the course of the sciatic nerve, measuring $3\frac{1}{2}$ by $2\frac{1}{2}$ inches, which presented a distinctly lobulated and villary appearance, being located in the derma and bounded beneath by the panniculus adiposus. It presented several points of ulceration and of excessive papillary epithelial (corneous) proliferation. On microscopic examination, this tumor proved to be encephaloid carcinoma, and was entered from below by several large blood vessels and nerves. There was no subcutaneous infiltration.

A second tumefaction—found in the left inguinal region, about one by two inches in diameter, quite adherent to the internal ring, and therefore non-reducible—was hernia of the great omentum.

The abdominal cavity was opened by crucial incisions and a most curious displacement of organs presented as follows:

The liver was mostly to the left of the median line and the suspensory ligament was attached $1\frac{1}{2}$ inches to the left of the line. The stomach was crowded downwards, with the pylorus $1\frac{1}{2}$ inches to the left of the umbilicus. The ileum lay mostly in the right iliac fossa, while the cæcum was displaced upwards, presenting a curvature upward and outward two or three inches above the ileocaecal juncture, which was situated below and behind the lower portion of the cæcum. The appendix vermiformis extended upward and inward, being bound to the mesenteric folds of the small intestine. The great omentum was firmly adherent to both the mesenteric and pelvic peritoneum, while a portion of it passed through the inguinal rings, as above stated. The parenchymatous organs were all cirrhotic, and the lower portion of the ileum presented marked enteric congestion.

The sigmoid flexure and rectum presented 50 or 60 diverticula, varying in size from that of a bean to half an inch or more in length, which had broken

through the muscularis at points away from the longitudinal bands, giving the appearance of excrescences or villary growths, but which were found to really be hernie of the mucosa. Several of the cavities were filled with hard secretions from the faeces, which would account for much of the pain during life, as the impaction of any substance would, if lodged in the appendix vermiformis.

The remaining portions of the autopsy were of no great interest, and are therefore omitted. The cause of death was general weakness from carcinoma and recent pneumonia; shock from a painful movement of the bowels and collapse.

THE PALLIATIVE TREATMENT OF CANCER OF THE UTERUS.—Dr. J. E. Burton (in *British Medical Journal*) thinks we are too apt to be discouraged when treating this disease, and to do nothing when the disease is in an advanced stage. Four measures can always be taken with more or less success:

1. We can attempt to bring about a more healthy action in the parts.
2. We can relieve pain.
3. We can moderate discharges, especially those of blood.
4. We can remove the fœtor of the discharges.

He suggests that the progress of a neoplasm can be checked, at least for a time, by exciting an inflammation which shall affect its immediate surroundings. Such a cordon of inflammation might be excited by the action of iodine or iodized phenol. He quotes Duploney for considering that concentrated acetic acid is the most satisfactory for such a purpose. Gallard is much in favor of the actual cautery, which he thinks might be used freely as often as once in three weeks. Of other caustic agents, nitric acid, acid nitrate of mercury, bromine, sulphuric acid, bichromate of potassium, and resorcin have been used by the author, and are all of benefit in certain cases. Before caustics are applied to an exuberantly granulating surface, the granulations should be scraped away as thoroughly as possible.

For the relief of pain nothing better than opium, in some form, by the rectum, can be given.

To diminish the vaginal discharge any reliable astringent injection may be given. Subcutaneous injections of ergotin will have a good effect in controlling hemorrhage.

The fœtor, which is so offensive, can be controlled by vaginal suppositories of iodoform used night and morning. The author has also found that Chian turpentine lessens the quantity of the discharges and the tendency to hemorrhage—hence it is not valueless. He thinks a spare diet is to be preferred when it is possible.

IRREGULAR APOPLECTIC ATTACKS DUE TO OTHER CAUSES THAN HEMORRHAGE AND EMBOLISM.—The term "apoplectic attack" is used in this paper to denote the sudden onset of the train of symptoms in which unconsciousness, hemiplegia, and convulsions are more or less prominent. Functional disturbances of the cerebral circulation, though severe and causing alarming symptoms, rarely terminate fatally. They may be summarized as follows:

1. Sudden *anæmia* causes unconsciousness and convulsions.
2. *Venous hyperæmia* has the same effects as *anæmia*.
3. *Arterial hyperæmia* more difficult to produce artificially, and less carefully studied, must be looked upon as a rare and comparatively unimportant event.

This is in marked contrast with the views of our ancestors,

with whom *active cerebral congestion* and *congestive apoplexy* were much talked of; more observations, however, has proved that convulsions, dizziness, and similar symptoms, formerly attributed to a rush of blood to the head, are in reality much more frequently dependent upon *cerebral anæmia*.—DR. GASPER GRISWOLD, in the *Jour. Amer. Med. Ass'n*, July 19, 1884.

CASES OF MYXCEDEMA, WITH AUTOPSIES.—By Dr. E. G. West, of Boston, in the *Proceedings of the Suffolk District Medical Society*, July 17, 1884. All the cases reported had the following symptoms: They were all women; the duration of the disease, mental strain, shock or hardship; rapid growth from a light to a large, fleshy woman; a slow, languid motion; fear in going about alone; the even disposition, never irritable; chilliness, even in summer; absence of perspiration; partial loss of taste, sight and hearing; the round, fat face; the swollen, translucent, wax-like skin; the broad nose, thick, coarse, purple lips; the dusky reddish-purple cheeks; the eyelids pendulous and transparent; the tongue pale, swollen, too large for the mouth; the abdomen enlarged, as if with fat, nowhere pitting on pressure; the universal swelling; the skin of the extremities rough, hard and scaly; no disease of the lungs, heart, liver or kidneys; temperature lower than normal, 95° F.; urine of low specific gravity, and diminished excretion of solids; no albumen nor sugar; liability to take cold; difficulty in swallowing, stiffness of the jaws, sleepiness, and the "Cheyne-Stokes" respiration.

Post-mortem—Rigor mortis present; skin pale; face and upper part of the neck swollen but not pitting on pressure; lips pale blue; legs slightly cedematous (pitting on pressure); brain showed nothing abnormal; sections through the walls of abdomen and thorax showed abundance of subcutaneous fat; voluntary muscles pale; pericardium contained two ounces of pale, yellow fluid; the tongue symmetrically increased in size one half; when hardened, examination showed frequent pigmentation of the apices of papillæ; larynx small; true and false cords swollen, elastic; glottis narrowed; section through the swollen mucous membrane showed a homogeneous glistening, translucent surface, without shrinking in the course of 24 hours; some fatty degeneration of the thyro-arytenoid muscle; submucous tissue of tongue and larynx gave the reaction of mucin; spleen normal; kidneys and bladder normal; uterus nearly doubled in size; ovaries large, with numerous dropsical follicles.

Prof. Orb describes the disease as seated in the connective tissues of the body, which are swollen and jelly-like, and cedematous with mucin; death being caused by the patient being smothered in his own connective tissue.

A curious resemblance between myxœdema and the cachexia strumipriva of Kocher, of Berne, who points out similar symptoms when the thyroid gland has been totally removed.

THE PHYSIOLOGICAL ACTION OF COCA AND COCAINE.—From observations made on himself, Dr. Eber Caudwell concludes as follows (*British Medical Journal*, Jan. 3, 1885): 1. That coca and cocaine exert a double action, acting as cerebral sedatives in small doses, and as cerebral stimulants in large doses. 2. That cocaine, given internally, dilates the pupil. 3. That cocaine, unless in large doses, possesses no toxic action.

OYSTERS FOR DYSPEPSIA.—It is said that there is no other alimentary substance, not even excepting bread, that does not produce indigestion under certain circumstances; but oysters never. Oyster juice promotes digestion. By taking oysters daily, indigestion supposed to be almost incurable has been cured; in fact, they are to be regarded as one of the most healthy articles of food known to man.—*Weekly Drug News*.

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"A regular medical education furnishes the only presumptive evidence of professional abilities and acquirements, and ought to be the ONLY ACKNOWLEDGED RIGHT of an individual to the exercise and honors of his profession."—Code of Medical Ethics, Amer. Med. Ass., Art. IV., Sec. 1.

Our practice is not "based on an exclusive dogma, to the rejection of the accumulated experience of the profession, and of the aids actually furnished by anatomy, physiology, pathology and organic chemistry."

A STEP IN THE RIGHT DIRECTION.

THE great fault with most of the medical colleges in this country is that they are private corporations, run by the faculty in the interest of their own pockets and reputations, and that there is generally a lack of means to provide the necessary accommodations and apparatus to even keep pace with the scientific advances of the age, to say nothing of being leaders, as they should be, of scientific investigation. We heartily approved of the suggestion recently made by the Commissioner of Education, that every medical college should have an appropriation of at least three hundred thousand dollars, and that two or more medical colleges might combine their forces and unite in one organization to secure the necessary amount. It is true, we should have a less number of colleges and fewer men with the title of "professor" before their names, but individual loss would be public gain. Medical colleges, richly endowed, with every facility in libraries, instruments and instruction for thorough scientific investigation and culture, would become great centres of thought and perpetual springs of knowledge. The splendid gift of Mr. Vanderbilt, recently, of five hundred thousand dollars to the College of Physicians and Surgeons of the Medical Department of Columbia College will place it in its power to become a scientific institution in reality as well as in name, and will probably obliterate the bigotry and intolerance of this stronghold of old code exclusiveness, by bringing together in the closest in-

timacy of scientific work men who can afford to be independent in thought and who will found their theories only on facts which have stood the test of the most thorough scrutiny.

We hail, with pleasure, the contribution of large sums of money to any medical college, for with improved facilities for scientific work, the bigots and the drones will be crowded out to give place to honest investigators and men of real ability in their special work. The sum of \$50,000 which has been recently appropriated by one of our public-spirited citizens, Mr. Andrew Carnegie, to build and equip a laboratory in connection with Bellevue Hospital Medical College, principally for the study of bacteria, will contribute something towards converting a mill for grinding out old code doctors into a scientific institution. The building is a handsome structure of red brick, 50 by 100 feet, and five stories high, located on East 26th Street, near First Avenue. The ground floor is divided into four rooms, two on each side of the hall, which runs through the centre. The rooms nearest the door are used as reception rooms, and the others will be occupied by the museum. On the second floor, at the rear end, is a large lecture room, lighted by a dome in the roof. The front room of this floor is also a lecture room. It is furnished with a long double table, with a deep groove in it. In this groove are little carriages, on which microscopes are fastened, in order that they may be quickly moved from student to student, so that each may examine for himself the specimens which are the subject of the lectures. On shelves in this room there are also a large number of specimens of diseased tissue.

The work room is on the third floor. Here can be seen a large number of test-tubes, in which are being cultivated, among other instructive things, various kinds of cholera bacilli. In large, shallow glass jars the process of development of other germs are going on. In a case, occupying the east end of the room, is a carefully selected and complete collection of the most approved apparatus, including microscopes with every variety of lense needed for the most delicate work.

The New York County Medical Society recently held their monthly meeting in the lecture room, and had an opportunity of seeing the work being done in the laboratory and forming some idea of the future usefulness of the institution.

The enlarged facilities for study now being introduced into private teaching and into many of our medical colleges will do away, to a greater or less extent, with the dictation and influence of narrow-minded men. Theories will be subjected to the most accurate tests, and men of all schools will find the elementary principles which form the basis of apparently antagonistic beliefs, when fully understood, are less antagonistic than they at first seemed. Principles will take their place in a great system of medicine simply on their merits, and however antagonistic they may seem when standing isolated, they will not be out of place in a system of medicine so broad and catholic that it seeks to utilize all truth, each having its use and each confined to its legitimate sphere of action.

A long step in the right direction has recently been taken by the Boylston Medical Society, which is made up of the advanced students of the Harvard Medical College, in a polite and courteous invitation to a distinguished member of the new school, Dr. C. Wesselhoëft, of Boston, to answer some questions concerning homœopathy. Fourteen questions were prepared by the Society, which were intended to bring out the distinctive belief of the homœopath, and in what he differed from the doctrine and practice of the old school. Dr. Wesselhoëft's statements were, as they must of necessity have been in a single lecture, concise, but clear, courteous, and to the point.

Some of the old school journals could not, in our estimation, be doing a greater service to their readers than by publishing Dr. Wesselhoëft's lecture. We commend this way of obtaining information to all schools. The old school and the new will find it much to their advantage to obtain a knowledge of principles from those who have made an honest and thorough study of them rather than from those who, set in their own opinions, only look at different views to ridicule and misrepresent them. The minute study in every department of hygiene, pathology and therapeutics, with the aids which science is every day furnishing in chemical tests and delicate instruments, is doing more to harmonize the profession than any amount of legal enactments or labored arguments.

A CHEMICAL TEST FOR CANCER.

It is sometimes difficult, even with the microscope in the hands of the most skillful, to diagnose with

unerring certainty the existence of cancer, while the microscope in the hands of any one but an expert may cast but little light upon the subject. In more than one instance cases which have been pronounced carcinomatous by what was considered excellent authority have been cured by following a systematic course of treatment for syphilis. Very many cases of undoubted cancer, especially of the breast in their early stage, have been removed by the knife and have never returned, but possibly some out of the many cases of cancer claimed to have been cured by medicine, were not cancer but syphilis or some form of dyscrasia which so closely simulated carcinoma as to have misled the diagnostician.

A Vienna journal publishes an interesting case where a prominent surgeon was called upon to operate in a disease which had been diagnosticated as carcinoma by an eminent physician and refused on the ground that Freund, after subjecting the blood to a medical examination, insisted that the case was not one of cancer but of syphilis. The case was accordingly treated for syphilis and cured.

Freund's process, the correctness of which has been verified in over seventy cases without a single failure, consists in taking about one drachm of blood, diluting it with water and after adding a few drops of a solution of chloride of iron and acetate of soda, to precipitate albuminates, the liquid is warmed and neutralized by a solution of caustic potash and filtered. If a small quantity of Fehling's solution is added and subjected to heat, a yellowish precipitate shows the presence of sugar. If this is not obtained a few drops of muriatic is to be added, the mixture again warmed and neutralized and Fehling's solution added. If glycogen is present this process changes it into sugar, which is seen in the yellow precipitate. Freund refers the reduction of Fehling's solution to the presence of sugar in the blood which could not be found in the urine in an appreciable quantity. The blood of sarcomatous patients subjected to the same process shows the presence of peptones which can easily be detected with acetic acid and the yellow prussiate of potash but will be free from sugar or glycogen while the blood of carcinomatous patients is positively free from peptones, but will contain sugar or glycogen. In this examination we must ascertain by the usual

tests that there is no diabetes in the carcinomatous and no anemia in the sarcomatous patients.

It would seem that in the microscope and in the chemical blood test of Freund we can reach with almost a positive certainty a correct diagnosis of carcinoma, but thus far no specific has been found for this terrible disease which, though occasionally destroyed, in the large majority of cases marches on to a fatal termination in spite of all our efforts to arrest its progress. Arsenic, which has been used more extensively than any other drug in this connection, has proved simply a tonic and has almost always failed as a curative. Well authenticated cases of cure have followed the use of phenic acid and the red clover, but so seldom that they may be considered as exceptional cases. In this, as in many diseases, we may tell the condition and foretell the end, but fail lamentably in furnishing the remedy.

Dr. Hughes says in the *Alienist and Neurologist* that the hope of conquering cancer lies in recognizing its neuropathic relations and in early and persistent, vigorous and confident efforts to improve them. The law of resistance to cancerous invasion is in the conservation of energy. When Pasteur wished to inoculate birds with the bacillus anthracis he lowered their vitality by chilling them, and some of them when the fever was at its height, were brought up again to the point of successful resistance by exalting their temperature. Other animals, too, which were inoculated with diluted virus, had the power of resistance excited, but not overwhelmed, and secured immunity through a developed power of resistance.

MANAGEMENT OF LABOR.

SOME points in the management of labor are ably discussed in a paper by Mr. W. H. Rean, M.R.C.S. (*Annals of the British Homœopathic Society*, Feb., 1885.) In answer to the question, What can we do before labor for the purpose of assisting our patient? he asserts that in arnica we possess a medicine all-powerful at this period, and by the side of which nearly every other drug sinks into insignificance. "It materially reduces each of the three stages of labor and marvelously minimizes the pains." Several cases are cited in support of this opinion. The remedy was administered in half-drop doses of the first decimal dilution. Spurious pains, when distinctly uterine and well-marked, present the following character-

istics: They are felt in the back, the hand placed over the uterus, distinguishes a decided contraction of that organ, and a vaginal examination discovers a slight dilatation of the os coincident with the uterine contraction.

These pains occur generally a month or a fortnight before actual labor, and hence afford an indication of some value to the practitioner. Secale 1 has proved most useful in allaying this troublesome symptom.

When labor has actually set in, "the examination may be made with the greatest comfort and safety to ourselves by the use of the thymol jelly, a substance which covers the hand with a collodion-like film, and contains a fair percentage of that valuable antiseptic, the wild thyme." The practitioner is recommended to give a preparatory enema of salad oil in every case, "as it removes any substance remaining in the rectum, and appears to be absorbed, thus adding materially to the rapid dilatation of the os, of the vagina, and lastly but not least, of the perineum."

In rigidity of the os, Mr. Rean has obtained excellent results from the use of caulophyllum, $\frac{1}{2}$ d of a grain every ten minutes. "When we find the os thin and rigid, the pains acute and nearly continuous, but without any apparent effect upon the progress of the labor, chloral will act with almost magical rapidity. From five to eighteen grains, given at intervals of fifteen minutes, will throw the patient into a somewhat drowsy state, moderate the severity of the pains, without diminishing their efficacy, and, above all, relax the cervix, causing it to respond to the pressure of the membranes, losing its knife-like edge, and becoming soft and more easily dilatable. This agent "calms the nervous irritation, predisposes to sleep, and the patient usually awakes after a peaceful slumber, refreshed, strengthened, and better prepared to undergo the final ordeal."

When the pains are feeble, quinine, in the first centesimal dilution, is often most efficacious, especially in those cases where a general debility appears the leading cause of the trouble.

Speaking of retained placenta, the author points out that under the use of arnica his cases of this kind have been reduced in number by more than two-thirds.

Hydrocyanic acid is mentioned as having proved most valuable in puerperal convulsions.

EUCALYPTUS IN TYPHOID AND OTHER FEVERS.

THE current number of the *Practitioner* contains a paper by Mr. Leighton Kesteven, of Australia, giving the results of an extended trial of the oil of eucalyptus, administered internally. Entering upon practice in Brisbane, Queensland, during the prevalence of typhoid fever as an absolute epidemic, attended with a proportionate mortality, the author gave eucalyptus in every case of the disease which came under his care, to the number of 220, within a period of about eighteen months. Among these there were only four deaths, each of them under very unfavorable circumstances.

The dose was ten minims every four hours. Without being absolutely nauseous, the medicine was found not to agree well with all stomachs; but this difficulty could be entirely overcome by careful emulsification, and the addition of half a drachm each of aromatic spirits of ammonia, spirits of chloroform, and glycerine, the latter entirely removing the rough, semi-resinous taste of the oil.

The effects of the medicine are, in brief, the following: *First.* A steady and permanent reduction in the force and frequency of the pulse—a result brought about, in some cases, with almost marvellous rapidity. *Second.* Lowering of the temperature. This occurs less rapidly, and may, perhaps, be entirely secondary to, and dependent on, the lowering of the pulse. *Third.* The beneficial effects on the tongue is very marked, almost immediately relieving the distressing dryness so universal in typhoid, and removing the thick brown coating, leaving but proportionately little fever, and frequently cleaning the tongue entirely in a very short time. *Fourth.* The skin, along with the reduction in its temperature, becomes moist and soft, in contrast with the dry hot skin so frequent and persistent, conferring a corresponding increase of comfort to the sufferer, who has previously felt as if his skin had been drawn tight all over his body. This alone is a boon to the patient of no small import.

Diet and nursing were carefully attended to in every instance—so that Mr. Kesteven was at times almost tempted to doubt whether any medicine was really required, until, in different cases, he put it to the test by suddenly discontinuing the remedy, when all the unfavorable symptoms would return directly,

and the experimenter would be “reconverted, confirmed in his faith.” He also contends that, “given the same number of cases, and the same dietary and other measures without the eucalyptus, you will not, and have not hitherto, obtained a rate of mortality which—taking the nature of the four fatal cases into consideration—is practically *nil*,” and he urges that a more thorough investigation should be instituted and the results published.

As to the *modus operandi* of eucalyptus in these cases, his idea is that it acts simply “as a germicide, striking at the root of the mischief, thereby depriving the fever of its power. Of course, on the other hand, it may be similar in its action to alcohol (as advanced by Schmeideberg) by retarding the oxidation, or by dilatation of the cutaneous vessels extending the cooling area, as Fothergill has it; or by some effect upon the nervous system; but by whichever mode it acts, its true properties remain to be demonstrated. The extraordinary shortness of the duration of the fever which it effects are most notable. I have, as a matter of practice, kept my patients in bed for the traditional twenty-one days, but under its effects the duration of the fever has been that length in but very few cases, the tenth day being just as often the termination of the elevation of temperature.”

“Experimentally, I have given this drug in two or three cases of pneumonia, with the most marked benefit.”

BEEF TEA AND BEEF PEPTONES.

THE ordinary forms of beef, including Liebig's extracts, which were only intended by the inventor as relishes, can in no sense take the place of milk and eggs, or of the beef peptones which are so made as to give, in concentrated form, nourishment easily assimilated. Eggs can be given in a variety of ways, but a very elegant way of administering them in delicate stomachs is in tea. Beat an egg up thoroughly in a cup intended for tea, add the usual amount of sugar and cream and then slowly pour in the boiling tea and you will have a dish fit for the gods. An egg lemonade is very delicate and agrees with almost every stomach. Put in the glass the lemon juice, the sugar and the cracked ice; now break in the egg, add the water and pour from one tumbler to another until thoroughly mixed, and you will have not only a cooling but a nutritious drink.

A teaspoonful of Phillip's Wheat Phosphate, or the acid phosphate can be used in the place of the lemon juice. Clysmic water used in the place of the ordinary water will make a more healthy and enjoyable drink. A very excellent way to give the beef peptones is by mixing them with milk, which entirely disguises any unpleasant taste they may have given in the ordinary way. Drinks like these will be found much better during the summer than lager, punches or cocktails.

NARCOTICS AND HYPNOTICS.

No ONE who has not been at times deprived of sleep can form any conception of how important a factor it is in the maintenance of health. So essential is the rest produced by sleep considered, that narcotics and hypnotics, such as opium and its alkaloids, the bromides and chloral, are often used with a freedom and lack of judgment which make them a fruitful source of injury instead of benefit. Habits are formed which require months of self-control to master. Symptoms are complicated and conditions masked by the injudicious use of drugs which stupefy and paralyze. This danger seemed so great in the early history of the new school that the patient was often denied the palliative effects of drugs much to his discomfort for fear of any possible injury from their narcotic and hypnotic action. Abundant evidence enforces the truth that narcotics and hypnotics are often needed as sleep-producers and pain-relievers, and that, given with a competent knowledge of pathological conditions and reflex action, they are as safe as any other class of drugs. Is there any better nerve-stimulant than opium properly administered, or any more dangerous drug in the hands of the ignorant? Given in the reckless manner of olden times, congestion of the brain, effusion, stupor, and death in children, followed the suppression of slight diarrhoeas which might have been easily cured with appropriate remedies, and in adults constipation, derangement of the stomach, and blood stasis complicated conditions and checked the formation and transmission of the nerve force necessary to proper circulation and assimilation.

The mania for bromides and chloral has caused them to be used injudiciously, oftentimes to the positive danger of the patient, and yet who, understanding their real nature and action, would exclude

those potent drugs from his practice on account of the danger they might produce when injudiciously administered? He would rather study more closely their action that he might be enabled to avail himself intelligently of both their curative and palliative effects.

A short time since we were called in haste to see a lady who had for some time had valvular disease of the heart and Bright's disease. The pulmonary engorgement was so great that there was a constant expectoration of bloody froth, and the whole heart was so disturbed that it seemed like a churn in such violent action that nothing but a strong trembling, quivering motion of the entire organ could be detected. It was apparent this turbulent action must be quieted or death would speedily ensue. Morphine in eighth of grain doses was given with prompt relief. For three days the heart was kept under control by this drug until the immediate danger had passed away. We are confident that the morphine did, in this case, what neither aconite, digitalis, veratrum viride, or convallaria could have accomplished, and for the time being saved life. Chloral, often given with such reckless regard of consequences or conditions, is one of the most valuable drugs in our pharmacopœia, but the physician who administers it as a sleep-producer or pain-reliever without studying carefully the conditions which produce these results, is very apt to fail in his purpose or find the after effects of the drug worse than the trouble for which it was given.

While, on the part of some physicians, who, we are glad to say, are rapidly becoming less, the old idea still prevails of meeting sleeplessness and pain with narcotics and hypnotics on general principles, and, on the part of others, who, we are also glad to say, are rapidly becoming less, there is an intense fear of ever using drugs for their hypnotic and narcotic action under any condition, the majority of the profession are studying the conditions of the system with more care and selecting the remedy in accordance with well established principles of action. Thus aconite, belladonna, gelsemium, baptisia, hyoseyamus, ignatia, veratrum viride, digitalis, and other drugs which have a direct action upon the circulation are found when indicated to produce a more healthy influence than drugs given for their narcotic and hypnotic action. Each drug has its own specific field of use.

It is the physician's duty to learn how to discriminate correctly and to assign to each remedy the work for which it is best fitted. The more intelligent and successful he is in this work the higher is his position as a scientific therapist.

STATE MEDICAL EXAMINERS.

THE attempt to establish a State Board of Medical Examiners in this State is further from consummation at present than ever.

The cause of this condition of things is largely because no two individuals seem to agree as to the best plan to be adopted, and each party doggedly sticks to his own pet ideas, regardless of consequences.

The project of establishing a mixed board will hereafter be abandoned, if we may judge by appearances, as, after working several years to establish such an organization, it has become evident to the manipulators that the project is impractical, as the *TIMES* has always claimed it to be.

The present purpose of the homœopaths seems to be to have separate examining boards for their own graduates, and allow the others to do likewise.

In our opinion, this method is far superior to the cumbersome one attempted in a mixed board.

The more proper plan, and the one which would be most economical, efficient and tend to unify the profession, is that of a single board, or boards made up regardless of schools, upon such high principles and with such restrictions and safeguards that abuses and violations of decency would be impossible. This could be easily done, were the profession so inclined. The composition of this board should be—of course, independent of the teaching bodies—composed of men who would not violate an oath to deal justly, and the position should be made one of such honor as to inspire the strictest integrity, with a severe penalty provided for misconduct of any kind whatever.

In our acquaintance, we know of plenty of men in both schools who could be trusted to do this duty with all possible justice.

If some are still afraid of the prejudices and other influences which sometimes control men, let the candidates be so guarded by rules and regulations, that they will be practically unknown to the examiners, and they will pass upon the examination without knowing where the student graduated. If

thought best, a knowledge as to where a student graduated could be made to incapacitate an examiner.

It will be asked "What about the questions in materia medica and therapeutics?" Our reply would be that these questions should be confined to those subjects which are supposed to be taught in every school which pretends to afford a full course of instruction in these branches.

This proposition will not only simplify matters practically, but will help to bring the members of the profession into greater harmony with one another, and in that way benefit our general cause.

BIBLIOGRAPHICAL.

DISEASES OF THE NARES, LARYNX AND TRACHEA IN CHILDHOOD. By Thomas Nichol, M.D., LL.D., S.C.L., Member of the Colleges of Physicians and Surgeons of Ontario and Quebec, etc., etc. New York: A. L. Chatterton Publishing Co. 1885. Pp. 308, octavo.

In this volume we have the results of thirty years' study and experience, of an excellent and most careful observer. The pathology and treatment of the affections of which it treats are most concisely and lucidly set forth, and show very extensive research. The book is well worthy a place in the library of any practitioner.

MODERN THERAPEUTICS OF THE DISEASES OF CHILDREN, WITH OBSERVATIONS ON THE HYGIENE OF INFANCY. By Joseph F. Edwards, M.D., editor of the *Annals of Hygiene*, associate-editor of the *Medical and Surgical Reporter*, author of "Bright's Disease and its Treatment," Fellow of the College of Physicians of Philadelphia, etc., etc. Philadelphia: D. G. Brinton, 1885. Pp. 346, octavo.

This volume is a retrospect of the cream of the literature of the subject of which it treats, and will be found of great service for many purposes.

THE LONDON MEDICAL STUDENT AND OTHER COMMONALITIES. Selected and compiled by Hugo Erichsen, M.D., Recently Professor of Neurology in the Quincy School of Medicine; Medical Department of Chaddock College; Licentiate of the Royal College of Physicians and Surgeons of Kingston, Canada, etc., etc. Detroit, Michigan: 1885. Pp. 207, large 12mo.

Motto: "A little nonsense, now and then,
Is relished by the wisest men."

This little book, which is full of wit and overflowing with humor, will while away many a sad moment, and shorten the weary waiting in the physician's ante-room.

THE OLEATES. An Investigation into their Nature and Action. By John V. Shoemaker, A.M., M.D., Lecturer on Dermatology at the Jefferson Medical College; Physician to the Philadelphia Hospital for Skin Diseases etc., etc. Philadelphia: F. A. Davis, 1885. Pp. 121, 12mo.

PUBLICATIONS OF THE MASSACHUSETTS HOMŒOPATHIC MEDICAL SOCIETY, 1884. Vol. VII. Pp. 308.

A HANDBOOK OF PATHOLOGICAL ANATOMY AND HISTOLOGY.

With an Introductory Section on Post-Mortem Examinations and the Methods of Preserving and Examining Diseased Tissues. By Francis Delafield, M.D., Professor of Pathology and Practical Medicine, College of Physicians and Surgeons, New York; and T. Mitchell Prudden, M.D., Director of the Physiological and Pathological Laboratory of the Alumni Association of the College of Physicians and Surgeons, New York. Lecturer on Normal History in Yale College. New York: Wm. Wood & Company. 1885. Pp. 576. Second edition.

The second edition of this valuable work has been so extended in its scope as to supply the needs of students and practitioners who wish to add a knowledge of the lesions of disease to that of its clinical symptoms, thereby forming a most practical treatise.

We find here instruction in the methods of making post-mortem examinations, of preserving diseased tissues, and of preparing them for microscopic examinations, and of preparing and examining bacteria, the pathology of the usual general diseases found in similar works, of violent deaths, and of deaths from poisoning. The illustrations are full and drawn from actual specimens by the authors. The text is most elegantly and concisely rendered, so that a subject which is dry to many, is made readable and interesting.

THE CURABILITY AND TREATMENT OF PULMONARY PHTHISIS.

By S. Jaccoud, Professor of Medical Pathology to the Faculty of Paris, Member of the Academy of Medicine; Physician to the Lariboisière Hospital, Paris, etc. Translated and edited by Montague Lubbock, M.D. (London and Paris), M.R.C.P. (England), Assistant Physician to Charing Cross Hospital, and to the Hospital for Sick Children, London. New York: D. Appleton & Co. 1885. Pp. 408, octavo.

The author of this work is considered, on the continent, as one of the best authorities on the subject of which he here writes, and he has the important faculty of stating his views with clearness. The bacillus, whose presence is regarded by some as the characteristic, and even the cause, of tuberculosis, was discovered by Koch since this work was written, so that the causative element is necessarily omitted, although the author holds to the infectious character of the disease. The author says, "Convinced and certain as I am of the curability and possible arrest of this formidable disease, I believe it my duty to communicate in every detail the results both of my studies and experience.

Grancher is believed by M. Jaccoud to have proved that, from an anatomical point of view, tubercular granulations, on the one hand, and the so-called pneumonic infiltration on the other, have the same structure.

Clinically, the author admits two distinct varieties of the disease: One, the inflammatory or pneumonic form; the other the chronic or ordinary form. The author of this work considers mal-nutrition, in its most general sense, the chief factor in the liability to tuberculosis and the actual production of tubercle, whether it be exudation or cellular formation, as due to actual inflammation.

M. Jaccoud's reputation is justly so great that his opinions, with respect to the treatment, whether hygienic, medicinal, by mineral waters, or climate, will be read with general interest, and these subjects are most fully treated in the volume before us.

PELVIC AND HERNIAL THERAPEUTICS. Principles and Methods for Remedying Chronic Affections of the Lower Part of the Trunk, including Processes for Self-cure. By Dr. George H. Taylor. Large 12mo., New York: John B. Alden. Long primer type, cloth. Pp. 282.

The author of this little work is so well known to our readers through his articles, which have appeared in our columns, that it seems only necessary for us to announce that his book may now be obtained by the profession. In this work on the chief diseases to which the pelvic and abdominal portions of the human trunk are subject, he has made important additions to the current knowledge both of the causes and of the methods of curing those diseases.

The great bane of the medical profession is an abject reliance on tradition and routine. The great temptation of the ordinary practitioner is to deal with symptoms instead of causes, and to content himself with temporary artifices for alleviating pain, instead of aiming directly at a radical cure of the evil whose existence the pain indicates. Dr. Taylor seizes with perfect clearness the principle that disease is a perverted process of activity and not a fixed product, and he directs his whole effort to the removal of the deranged conditions which are the cause of that perversion. His extensive practice, ranging through thirty years, has given him the most abundant experience, which he has interpreted with common sense and a fresh insight amounting to genius. It is estimated that about one person in eight wears a truss. Now, Dr. Taylor claims that trusses never cure, but usually aggravate and perpetuate the troubles on account of which they are worn. In the meantime he points out and illustrates the means of a ready and permanent removal of the evils by attacking them in their seat of origin. His theory is that the whole class of painful disorders allied with pelvic congestion, originate in a weak condition of the muscular and other tissues charged with the office of upholding the interior contents of the lower portion of the trunk and keeping the various organs in their proper places in due adjustment with each other. The displacements resulting break the normal ratios of the activities of the organs pressed upon and intertangled with each other, and destroy the integrity of the rhythmic waves which in a state of full health and strength are ever passing through the whole organism. This rhythm, lowered and broken, he would restore by various exercises, passive and active, ingeniously adapted to strengthen the relaxed and inadequate supports until they reassert their authority and the parts are adjusted again in the harmonic form of the whole.

PROGRESSIVE MEDICINE. A Scientific and Practical Treatise on Diseases of the Digestive Organs and the Complications Arising Therefrom. By Ciro De Suzzara-Verdi, M.D., late Acting Assistant-Surgeon at Balfour Hospital, U. S. A., Professor of Physiology and Pathology in the Cleveland Homœopathic College for Women. Philadelphia: F. E. Boericke, 1885. Pp. 350, 8vo.

This little volume contains the observations of a hard-working and practical physician, who has carefully noted his facts as they occurred, and many clinical cases are reported *in extenso* which are worthy of study. The text is divided under the following heads: Part I.—Importance of Physiological Knowledge, Mal-assimilation, Inanition and Decay; Troussseau and Pidoux's Criticism; Predisposing Causes to Mental Diseases. Part II.—Clinical; the Dual Effects of Medical Agents; Nutritive Constituents of Alimentation; Alimentation in Disease; on certain Beverages and Culinary Principles.

A CYCLOPEDIA OF DRUG PATHOGENESIS. Issued under the auspices of the British Homœopathic Society and the American Institute of Homœopathy. Edited by Richard Hughes, M.D., and J. P. Dake, M.D., with the aid of the following Consultative Committee: Great Britain—Drs. J. Drysdale, R. E. Dudgeon, A. C. Pope. United States—Dr. C. Wesselhoft, E. A. Farrington, H. R. Arndt. Part I. Abies-Agaricus. London: Printed by J. E. Adlard, Bartholomew Close, E. C. 1885. Pp. 192. Octavo

In compiling this work, the following order has been observed: (1) The scientific name and synonyms of each drug and its natural order. (2) A narrative of all provings with the symptoms in the order of their occurrence, with such condensation as completeness would allow. (3) In the case of virulent medicines, selected cases, concisely condensed, to illustrate the various forms of poisoning. (4) The results of experiments on the lower animals. (5) All versions and copies are traced to their originals. (6) No drug is included which has not shown pathogenetic power in two or more individuals. (7) No symptoms are reported as occurring from a drug administered to the sick. (8) No symptoms are reported as occurring in the persons of provers under the influence of other drugs, or when in conditions or circumstances not allowing a clear reflection of the pathogenetic influence of the drug under consideration. (9) No symptoms are included reported as coming from attenuations above the 12th decimal unless in accord with the symptoms from lower attenuations.

The text is printed in two sizes of type, indicative of the relative value of the subject-matter, in the opinion of the editors, and covers twenty-three different drugs—including all the acids.

The reader will readily see, by the above analysis of the schema upon which the work is based, that it contains simply reliable provings—as far as can be judged—and reports of poisoning cases in a narrative form, and constitutes matter which the real student of materia medica requires. We are quite aware that the majority will be disappointed with the work, but it is just what we must have for reference and from which a real condensed materia medica can be made with the aid of clinical therapeutics.

What we need most now, is a reliable and practical condensed hand-book of materia medica, and it requires talent which has not yet shown itself, so far as we know.

The work under review, so far as we can see, has been faithfully done, and Drs. Hughes and Dake are to be congratulated on this beginning, notwithstanding the fact that it will probably go no further, unless by private undertaking. We are glad to see that the work is not improperly dubbed "homœopathic."

INSOMNIA AND OTHER DISEASES OF SLEEP. By Henry M. Lyman, A.M., M.D. Chicago: W. T. Kerner, 1885.

Dr. Lyman discusses, in this little volume, the causes of sleep and insomnia, the remedies indicated to produce sleep and the nature of the phenomena often occurring during its presence, such as dreams, somnambulism, etc. The author has evidently studied his subject deeply from a scientific point of view. His suggestions as to the causes of insomnia and the indications for remedies to control it, are well worthy of consideration.

REPERTORY TO ECZEMA.—By Charles F. Millsbaugh, M.D., Binghamton, N. Y. New York: A. L. Chatterton, Publishing Co., 1885. Pp. 43, large 16mo.

A SYSTEM OF MEDICINE, BASED UPON THE LAW OF HOMŒOPATHY. Edited by H. R. Arndt, M.D. In three volumes.

The first volume of this extensive work on the practice of medicine comes to us from the Hahnemann Publishing House, F. E. Boericke, Philadelphia. In general appearance, the work is an elegant specimen of book making, and would do credit to any publishing house. The plan resembles Reynolds in this, that the different subjects are discussed by authors who are supposed to be specially fitted for the departments assigned to them. The editor says, in his preface, "The entire homœopathic school have for years, experienced the want of a work on 'Practice,' which should take the place of the very excellent, but now old, treatise of Baehr, Kafka and others. It was justly argued that none of these works are sufficiently comprehensive to serve our students as a satisfactory text book, or our practitioners as a reliable guide for consultation and a safe authority in times of perplexity and doubt."

Numerous works on practice, by distinguished writers in the old school, have been issued during the past few years, very able in pathology, but deficient in treatment as viewed from the standpoint of the advanced and more scientific therapeutics of the new school. While the editor intends to make his work fully up to the high literary and scientific standard of the best in the old school in the descriptions of the causes, symptoms, and pathological conditions of disease, he aims to make it more acceptable to the profession by outlining the indications for remedies, as seen from a careful study of the principle of *similia*. The present volume contains articles by fourteen physicians, all of whom are well known to the profession. A more extended notice will be reserved for the conclusion of the work.

CORRESPONDENCE.

MEDICAL LEGISLATION.

THE following bill, passed May 1st, has been signed by the Governor:

AN ACT to amend an act entitled "An act to incorporate medical societies for the purpose of regulating the practice of physic and surgery in this State."*

SECTION 1. Section thirteen of the act passed April 10, eighteen hundred and thirteen, entitled "An act to incorporate medical societies for the purpose of regulating the practice of physic and surgery in this State," shall read as follows:

§ 13. And be it further enacted, that it shall and may be lawful for any medical society of a county incorporated prior to this act, and for any such society created pursuant to the provisions of this act, and for the medical society of the State of New York to take purchase, and hold for the use of said society any estate, real or personal, provided that the aggregate estate, real or personal, of any such society shall not exceed the sum of fifty thousand dollars, except in the case of the medical society of the county of New York, which may hold property aggregating in value one hundred thousand dollars. Such societies may collect annual dues and assessments from members, provided that the aggregate of assessments and dues of any member in any one year shall not exceed the sum of five dollars.

§ 2. All acts and parts of acts inconsistent with this act are hereby repealed.

§ 3. This act shall take effect immediately.

* Chapter 204, Session Laws of 1885.

OUR LONDON LETTER.

To the Editors of the N. Y. Medical Times :

THE agitation of the teachers connected with the London medical schools has had its effect on the Senate of the London University. They have decided to relax their rules, hold the Preliminary Scientific Examination twice a year, and allow any candidate to take up two out of the four subjects at a time, if he wishes. It is not improbable that the portals of the Royal College of Surgeons will be also somewhat widened, and some London students saved the trouble of migrating (with their fees) to other previously less exacting examining boards. Perhaps the change may prove, on the whole, a healthy one. It will lower the standard almost inevitably. The London M.D. of the future will not necessarily be the intellectual gymnast he has been compelled to be hitherto. Whether he will be the worse practitioner is another question. If less attention is required to be given to such subsidiary sciences as chemistry, botany, and natural history, more may be given to human anatomy, attendance in surgical and medical practice and actual experience in handling sick persons and finding out their true condition; more time and attention may be devoted to the study (now shamefully neglected, though most important of all) of the means at our disposal for the cure of the sick. It must be confessed that chemistry, botany, and natural history go a very small way in helping to the attainment of proficiency in any of these arts. At the same time, if the London degree is to retain anything of its old value, the examinations, relaxed in one direction, must be made more stringent in all those points which test the qualification of men to practice their art. The profession of medicine does not need professors of botany and chemistry so much as men who know disease when they see it and how to treat it.

An event which will become historical in the annals of homœopathy took place on Wednesday, April 29, at the Café Royal, Regent street. Drs. Drysdale, Dudgeon and Hughes were entertained at a dinner, presided over by Dr. Hamilton, and were presented with a testimonial by their colleagues. A handsome silver punch bowl, with suitable inscription, was given to each of these gentlemen in recognition of the immense services rendered through many years to the cause of medical science in connection with the *British Journal of Homœopathy*. As one of the speakers said, upwards of forty years before, the starting of the journal had been inaugurated with a dinner, and it was fitting that a dinner should signalize the closing of its career. Everything passed off most satisfactorily. Dr. Hamilton, who filled the President's position to admiration, in presenting the gift to each of the guests of the evening, said he expressed the feeling of all when he said he regretted very much the journal's decease. He sketched briefly the career of the journal and the work it had accomplished. Dr. Drysdale returned thanks on his own behalf, and gave an account of the founding of the journal in which he himself had taken a prominent part. He considered that there was still room for a quarterly journal, which should be called the *Journal of Experimental and Applied Pharmacodynamics*. Hahnemann, he said, claimed all experiments with the positive effect of drugs, and the application and knowledge thus obtained in practice as his own. He was followed by Dr. Dudgeon, who said that as journals went—especially quarterlies—the *British Journal of Homœopathy* had attained a very venerable age. No other medical quarterly had lived nearly so long. He spoke of the boldness of the original promoters, who had only ten practitioners in the country to back them at the start. The boldness was justified by

success, many joining their ranks. The journal did good polemical work; it defended homœopathy against attacks; it proved it was scientific and was not quackery; it defended its adherents against persecution, and it helped to secure the passing of the twenty-third clause of the medical act, which is the charter of our liberties. He did not agree with Dr. Drysdale that a quarterly was still needed. He thought that the heavy artillery might give way to the arms of precision represented by the monthlies now that the Mahdi's of allopathy had been defeated. He contrasted the practice of medicine of to-day with that in vogue when the journal was first started.

The toast of the evening was entrusted to Dr. Pope. He called on the company to drink the health of Drs. Drysdale, Dudgeon and Hughes. He said it was one of the greatest pleasures he had ever experienced to propose that toast. He spoke in eloquent terms of the work of the honored guests, and their healths were drunk amid great enthusiasm with rounds of cheering. Dr. Hughes replied in behalf of all three, and added his own personal thanks to those already tendered by Drs. Drysdale and Dudgeon for the beautiful gifts. Dr. Hughes said that beside the other two, his connection with the journal was but of yesterday; and yet twenty-two years was a considerable slice out of the life of a man. Dr. Hamilton had spoken of the great value of the translations from the German, in the early numbers of the journal. Dr. Hughes quite concurred, but he wished to draw attention to the work, in later numbers, of a comprehensive survey of the work done in America. He was happy to think that he had been associated with this branch of the journal's work. At home here we appear to be stationary—if not retrograding; to America we must look for the future of homœopathy and of medicine. After the President's health had been drunk, he said, in returning thanks, that it was exactly fifty-one years that day since he became a pupil of the late Dr. Quin. Mr. Cameron, the oldest homœopathic practitioner, and the most respected now living among us, was also toasted. Other toasts followed, and a most enjoyable evening was brought to a close, where forty sat down to dinner and many regretted they could not be present. The whole proceeding reflected the greatest credit on Dr. C. L. Tuckey, the honorable secretary of the presentation committee, on whom devolved the lion's share of the arrangement.

We are still in the midst of cholera disputes. The latest announcement is that the so-called comma-bacillus was described long ago, and pronounced by Dr. Baly and Gull to have nothing to do with the causation of cholera. At present it would seem that "Koch's cholera comma-bacillus" is not Koch's discovery, is not the cause of cholera, is not comma-shaped, and is not a bacillus. In the meantime, Dr. Emmerlich announces from Italy that he has found the *real* culprit. How if it should turn out that there are half a dozen causes of cholera at least! It is some consolation to know that such things as camphor, arsenic and veratrum album still exist and don't care for bacilli.

Yours fraternally, JOHN H. CLARKE, M.D.
15 St. George's Terrace,
Gloucester Road, S.W., April, 1885.

THE OPPOSITION TO THE DISCONTINUANCE OF THE TERM HOMŒOPATHY.

To the Editors of the N. Y. Medical Times :

Following the lead of your journal, I have discarded the designation *homœopath*, and shall hereafter practice medicine under the broad and all-inclusive title *physician*. I have

not changed my method of practice in the least, nor have I ceased to believe that the principle *similia similibus curantur* is a valuable guide in the administration of many medicines. Careful examination of current medical literature, however, has satisfied me that the time has come when the distinctive designation homœopath should be dropped. Heretofore I have believed it necessary that a body of physicians should continue calling themselves homœopaths, lest the principle expressed by this word, might be lost to medical science. I am now convinced, however, that there is no danger of this; the principle is already quite firmly established and will, ere long, be accorded its proper place in therapeutics.

The aggressive use of the designation, homœopath, will not hasten its recognition—on the contrary it will retard it. In my opinion more can be done to establish the therapeutic method in question, by one who has discarded the term, than by a dozen who continue to use it. I predict that those physicians who call themselves homœopaths, simply to force upon the regular profession a fact they consider of vital importance to medicine—and this seems to me the only reason an honest intelligent man can advance for doing so—will soon cease to use the designation. Two classes of practitioners will however remain, who will not give up the term. The first is composed of the “high potency practitioners.” Were it not that these monomaniacs had arrogated to themselves a name to which they have really no right, I would certainly not waste one word on them. People who believe in drug-spirit, existing independently of drug substance, may be psychologically interesting, but deserve no more to be argued with than do the patients of an insane asylum. To be a homœopath one must prescribe a medicine known to produce symptoms similar to those manifested by the disease to be treated. A high-potency practitioner prescribes milk-sugar or alcohol absolutely devoid of drug substance, however, and hence he fails to fulfil this requirement. The public should be shown the utter senselessness of those who pride themselves on never using a preparation containing drug-substance and should be taught, that whatever such practice might be called it is certainly not homœopathic.

The other class of practitioners who will protest against the abolition of the term, homœopathy, is composed of quacks, who use the name simply because it pays pecuniarily to do so. This class is a large one and many shining lights in the homœopathic profession are members of it.

Practicing anything they happen to know, these knaves palm it all off, on an uninformed public, as pure homœopathy. They pander to all-prevailing misconceptions and utterly degrade a most noble calling. Finding, for instance, a foolish notion to exist, that homœopaths may not use quinine, they at once loudly proclaim that they never use it, and at the same time administer to their patients “pepper pills,” which “pepper pills” contain several grains of quinine and a fraction of a grain of pepper! Is it reasonable to suppose that such swindlers will give up a name, which serves to draw them trade? No indeed, so long as it *pays*, they will call themselves homœopaths, and shame the devil. I only wish it were possible to impart sufficient knowledge of medicine to the people to enable them to discriminate against the fools and knaves in the medical profession.

Many misconceptions exist which should be removed. The idea prevails that medical science is split into rival systems; the chief of these, being the allopathic and homœopathic. Not only the public, but many practitioners entertain this notion. Educated physicians appreciate the fact, of course, that such a thing as an allopathic school of medicine does not exist. Members of the regular profession are not allopaths, but represent medical science devoid of all “pathies” and

“isms.” Homœopathy represents simply one therapeutic method and is consequently only a part of general medicine and not its *ricol*. Furthermore much doubt exists whether the word is not a misnomer for what it is intended to express. Let us, then, discard it and practice in unity simply as *physicians*.

F. W. KOEHLER.

LOUISVILLE, KY., May 14th, 1885.

TRANSLATIONS, GLEANINGS, ETC.

THE PARASITES OF MONEY.—To the carriers of infectious material, money has at last been added. Recently, Prof. Reinsch, of Erlangen (*Allg. Med. Centr. Zeit.*, 31, 1884), examined a number of coins, and found, to his astonishment, that all coins which showed some incrustation, little sediments, etc., on their surface, contained living bacteria. Reinsch then collected coins of all nationalities, and made the same observation in all coins that had been in circulation for a number of years. When the adherent dirt-particles are removed with a perfectly clean aseptic knife, and dissolved in distilled water, a sufficiently powerful microscope will at once reveal the bacteria. The dirt sticking to coins seems to offer to these microzymes a soil specially fertile and favorable to their development. Considering the immense circulation of money passing through millions of hands, it may be probable that coins form no small factor in the transfer of zymotic disease.

A series of coins which had for some years been in circulation were freed from their dangerous parasites by placing them in a mild boiling solution of caustic potash, which, by removing all dirt and dust-particles and all incrustations from the coins, liberated them also from their by no means innocuous tenants.—*Medical and Surgical Reporter*.

DIABETES.—After an examination of many diabetics, Dr. Magitot has come to the following conclusions: *First*. Examination of the mouths of diabetics furnishes a constant symptom of the disease. *Second*. This symptom may be designated as an alveolar osteo-periostitis. *Third*. This manifestation appears at the outset of the disease, persists during its course, and can, in consequence, be considered a pathognomonic symptom. *Fourth*. This alveolar affection considered as a symptom of diabetes, presents three periods. Its first period is that of simple deviation of the teeth. Its second period is that of loosening of the teeth and alveolar catarrh. Each of these periods is in relation to the phase of the constitutional disease. The third period, that of the falling out of the teeth, corresponds to a more advanced stage of glycosuria. Besides this last symptom there may occur, if the patient lives long enough, an osseous eruption, which may or may not be consecutive to a gangrene of the gums. The appearance of this latter complication is evidence of a critical disease, as it ordinarily ushers in its fatal termination. The value, as a symptom, of the first stage of dental changes, remains to be determined. It must be obvious, however, that it can only occur in the more chronic form of glycosuric diabetes.

COLD BATHS IN PNEUMONIA.—Dr. Chaumier, in *La France Médical*, concludes: 1. Cold baths present no danger. 2. They diminish pulse, respiration, temperature, dyspnea and thirst; the *bruit de souffle* caused by the fever, disappears during their use. 3. Not having used the baths in very severe cases, he could not yet say whether they would diminish mortality. 4. In adults, to procure permanent benefit, the baths should be given every two or three hours.

SORE THROAT IN CHILDREN.—HENRY ASHBY, M.D., M.R.C.P. (*Practitioner*, London, Dec., 1883), mentions four principal varieties:

1. Simple tonsillitis. 2. Scarlatinal tonsillitis. 3. Pseudo-diphtheritic. 4. Diphtheria.

Weakly and scrofulous children are especially subject to the first. It is oftener seen as a complication of alimentary disorders, as those of liver and stomach, than of the respiratory tract, as bronchitis and laryngitis. It frequently precedes rheumatic attacks. It may be the result of the scarlatinal poison. In proof of this he cites an interesting series of eight cases occurring in a hospital ward within a few days. Several hospital nurses also took the disease. The first patient attacked, it was found, had been exposed to the genuine scarlatina a few days before. None of the cases had an eruption. One, a patient in previously bad condition, died. No insanitary conditions prevailed.

In view of the difficulty—at times the impossibility—of diagnosing scarlet fever from simple tonsillitis, the writer recommends the isolation of all children with febrile sore throat as long as faucial congestion remains. The points in favor of scarlatina are: the presence of vomiting and diarrhoea in the stage of invasion; a pulse of 130–160; not necessarily a high temperature; marked injection of the uvular pillars of the fauces and tonsils. Later, the enlargement of the cervical lymphatics, with tenderness; the implication of the nasal mucous membrane, and a yellow exudation over the tonsils and uvula make the diagnosis of scarlatina tolerably certain.

Under pseudo-diphtheria the writer includes a class of cases which are said to bear the same relation to diphtheria that epidemic tonsillitis bears to scarlatina. It prevails where diphtheria does; is attributed to sewer gas and other poisons. They differ from it in that the cervical glands are rarely involved, the membrane is less tough, the nasal mucous membrane unaffected, the urine does not contain albumen, the usual sequelae of diphtheria are absent. The prognosis is always good. The duration is rarely over a week.

The sore throat of diphtheria is differentiated from anginous scarlatina, by the fact that in the latter we rarely have true membrane. A yellowish exudation may cover the tonsils, perforations and even sloughing of the palate may occur, and there may be much external cellulitis, but the feathery, whitish, adherent exudation of diphtheria is absent. The amount of albumen in the urine of scarlet fever is usually slight; in diphtheria it is often fifty per cent.

CANNED FOODS.—John P. Hawkins, C. S., Brevet Major-General, U.S.A., says in the *American Grocer*: there is hardly a military station in the land where officers and soldiers and their families do not habitually use canned foods, and, as a class, army people are, without doubt, the largest consumers of canned articles in proportion to their number of any other in the country; yet, in all my army experience (and for many years I have been chief commissary of a military department, and, as such, had charge of supplying posts with all their subsistence), I have never known or heard of a case of canned goods poisoning in the army. There is every reason for considering canned articles as good for food as any food can be. The experience of our army ought to be conclusive on this subject. And no person having a decent knowledge of what is good or bad, sound or unsound, could be misled into eating an improper article from a can any easier than he could be induced to eat a decayed potato or a tainted piece of butcher's meat.

HEBRA'S CONTINUOUS TEPID WATER BATH.—The continuous tepid water bath occupies a prominent place among the elder Hebra's valuable contributions to general therapeutics. This bath consists of a large bath tub, in which an iron frame with transverse slats is suspended by chains, so that the patient may be withdrawn from and returned to the water by means of a crank. The iron frame is covered with a horse-hair mattress, and furnished with comfortable pillows. The patient, perfectly nude—without any surgical dressing whatever—is placed in an easy position upon the mattress, and the bath-tub is filled with water of thirty to thirty-one degrees C. temperature. A sensation of chilliness is usually experienced at this period, which is immediately dispelled by the rapid elevation of the water's temperature to thirty-eight or forty degrees C. The temperature of the bath is permanently maintained at this degree by the continuous renewal of the water. A sheet, or other thin covering, may be thrown over the patient, and is useful by reason of its subjective effect.

The patient remains in the bath, day and night, except when withdrawn for the purpose of evacuation of the rectum or the bladder. There is no limit to the period of time which may be spent in the bath without detriment to the general health. Hebra has kept patients in the bath for periods of nine and ten months.

From this brief sketch it will be inferred that the pathological conditions which indicate the continuous tepid-water bath are numerous and varied.

Burns, gangrenous wounds, bed-sores and severe cases of pemphigus are notable examples of such conditions.

The best local treatment for burns—especially when a considerable extent of surface is involved—is to be found in the continuous bath. The terrible pain is relieved as by magic, psychic disturbance is quieted, and the patient frequently falls into a refreshing sleep. The intense thirst—usually developed during the second stage—is slaked, without the imbibition of liquids, which are rejected as soon as swallowed. Of course, in severe burns this method of treatment is too frequently of a merely palliative character; the patient dies in the bath just as he does under other methods of treatment.

When, however, death does not immediately follow the burn, we have a method of local treatment, at once simple, painless and effective. "The water protects the wound surfaces from contact with the atmospheric air, prevents the decomposition of the sphacelus, and favors its separation; it makes every dressing and change of dressing unnecessary, limits the secretion of pus and hastens cicatrization" (Billroth.)

Gangrenous wounds, especially the puerperal ulcers of the vulva and vagina, during the *puerperium*; bed-sores, from all causes, but particularly from spinal injuries, are influenced in the most favorable way. The patient is spared the distress and fatigue of all change of dressing, the wounds receive absolute antiseptic attention, and the attendants are relieved of much tedious and unnecessary labor.

Dermatologists very generally admit that grave cases of pemphigus find the best local treatment in Hebra's continuous bath. The pain, itching and burning sensation of this distressing affection are relieved, and comparative ease and comfort gained. In these cases the action of simple water is both palliative and curative.

As at present informed, there is no hospital in America in which the continuous tepid-water bath of Hebra is an accepted institution. It is difficult to give a valid reason for such wilful neglect of an invaluable therapeutic resource. The cost of construction and maintenance is relatively small, so that expense cannot be pleaded as an extenuating circumstance.—*Chicago Medical and Surgical Journal*.

THE MILK-TREATMENT OF DISEASE.—In a rather extended experience with this treatment Dr. Tyson (*Journal American Medical Assoc.*) has met with encouraging results in the following conditions :

1. In diabetes mellitus he has found no measures so efficacious as the dietetic, and of the dietetic, none so prompt as the exclusive skimmed milk regimen. The milk gives the crippled organs, especially the liver, more complete rest than any other food, thus allowing the reparative tendency of nature to assert itself.

2. In certain forms of calculous disease, he has yet to see a case of uric acid gravel in which, sooner or later, the persistent use of milk did not cause entire disappearance of the deposit. He found signal benefit from it in a case of nephritic colic. It may also obviate the oxalate of lime tendency, but will not dissolve the deposit. In phosphatic calculus it is rather contra indicated, because it has a tendency to alkalize the urine.

3. In Bright's disease it has accomplished good. It is especially indicated in the contracted kidney of interstitial nephritis, causing, frequently, a rapid disappearance of nausea, vertigo, headache, and other symptoms. In parenchymatous nephritis and in amyloid kidney it has proved less useful, but often does good by producing diuresis and relieving dropsies.

4. In gastro-intestinal disease, ordinary dyspepsia is sometimes signally relieved. In gastric ulcer, the use of no other food than peptonized milk should be permitted. We may expect "the most satisfactory results" from its use in bowel affections, especially of the large intestine.

5. In obesity it has given most satisfactory results, reducing the weight consistently with health. It seems to do this by making the system call upon its stored-up subcutaneous fat oxidizable material, the milk furnishing very little of this itself.

To sum up: Milk is highly useful in disease, especially those mentioned, because it is non-irritating, leaves little waste and makes the smallest demand upon the digestive function. Skimmed milk is preferable in diabetes and some other affections, because it is more assimilable than milk with cream. Some objections to its use have been urged, as that it sometimes causes indigestion, flatulence and constipation. The addition of lime-water will do away with the first two objections; a mild laxative will obviate the latter.

The milk is to be given as follows: Four ounces every two hours from 7 A. M. to 9 P. M., at first. This, of course, will be insufficient. It is to be increased afterwards to six, eight or more ounces every two hours, until the quantity is from five to ten pints in two to four hours, according to the needs of the patient. The quantity may be increased by giving some at night. After a varying time other food may be tentatively given until it is found that it does not cause symptoms to reappear.

A NEW CURE FOR INDIGESTION.—Under this heading, the *Boston Medical and Surgical Journal* states that a "gentleman of sedentary life, who has long been indisposed with indigestion and the hypochondriac passion, tried riding, and several other sorts of exercises, but with little effect, was at last prevailed upon, by the advice of an eminent physician, to try being tossed in a blanket. This was accordingly performed every other morning for a fortnight, and has been attended with the greatest success, the gentleman being now much better than he has been for two years past."

It used to be reported, in our youthful days, that old John Jacob Astor, when too feeble to stir around, was regularly subjected to this treatment.

HERPES LARYNGIS.—Herpes laryngis is a rare disease. During the past six years the writer has seen five cases, while of pharyngeal herpes his note-books give account of more than one hundred cases. The proportion, then, is about one in twenty.

The disease is, probably, not so rare as it seems, since the difficulty of diagnosis is greatly increased by the rapid appearance and disappearance of the eruption.

No doubt many cases of so-called simple neuralgia are really cases of herpes, the eruption not being observed.

The following conclusion may be drawn from the writer's cases, although it must be distinctly understood that any conclusions from so few cases must always be subject to modification :

1. There exists such a disease of the larynx as herpes.
2. Its character is that of neurosis.
3. It is closely allied to herpes of the pharynx and other mucous membranes.
4. It differs from other forms only on account of the peculiar microscopic anatomy of the larynx.
5. It is peculiarly a disease of malarious districts, and one of the eccentric developments of malaria.
6. It simulates tubercular inflammation of the epiglottis. The differential diagnosis, however, is easy. It is based upon the extreme rapidity of development, the absence of fever, the history of malarial affections, the previous or simultaneous development of herpetic eruption elsewhere, and the rapid disappearance of the disease.
7. Its seat is usually the posterior surface of the epiglottis.
8. The nervous system is always profoundly affected.—S. H. Chapman, *New York Medical Journal*, Oct. 18, 1884.

GELATINE PROBES FOR LACHRYMAL STRICTURE.—The treatment usually employed in stricture of the lachrymal canal is open to many objections. The dilatation of the canal with the metallic or hard rubber probes is attended with more or less pain, and some patients prefer to endure the inconvenience of an obstructed duct rather than undergo the operation. When the stricture is complicated with suppurative inflammation of the sac, necessitating the use of an astrigent injection, the difficulties to be overcome are greatly augmented.

The successful employment of medicated gelatine pencils in gleet suggested the idea that small probes made of gelatine, with astringents and anodynes incorporated, would be a great advance in the treatment of lachrymal obstruction. Acting upon this suggestion the Western Suppository Company prepared galatine probes about the size of a No. 1 Bowman.

Several oculists have given them a trial and report that they are delighted with the result. The probes are pliable, and adapt themselves to the curves of the canal with the same readiness that the soft rubber catheter does to the urethra, and by slowly dissolving keep the diseased part bathed in the medication much longer and more effectually than by any other means.—*Western Medical Reporter*.

INTRAFUSION.—Mr. Charles Jennings observes, in a recent number of the *British Medical Journal*, that there are two classes of cases in which intrafusion may be employed—one in which the amount of blood lost has not exceeded a certain definite ratio of the body weight, and the other in which the loss has been more excessive. Intravenous injections of salt solution are indicated, he says, in the former case, but transfusion of blood alone will restore the patient in the latter. In other words, merely adding to the supply of fluid will not answer in cases of excessive loss of blood.

GLAUCOMA.—Glaucoma, as I believe, is a disease in which there is an obstruction of Schlemm's canal, with some lesion in the ciliary region, which is peculiarly liable to be disturbed here on account of the very complicated network of blood vessels and nerves entering and leaving the eye at this point. The symptoms of glaucoma are :

1. Increased tension of the eyeball.
2. Rapid increase of any pre-existing presbyopia.
3. Venous hyperemia.
4. Dilatation and sluggishness of the pupil.
5. Cloudiness of the aqueous and vitreous humors.
6. Periodic dimness of sight.
7. Appearance of a halo of prismatic colors around a light, as that of a lamp.
8. Contraction of the field of vision.
9. Ciliary neuralgia.
10. Anesthesia of the cornea.
11. Scotomata.
12. Arterial pulsation of the fundus of the eye, and cupped disk.

If glaucoma is of the acute form, its course is often most rapid, destroying the entire vision in a few hours. In the chronic form, the course of the disease is slower, and may extend over a period of years ; but it is steadily onward, and if not relieved by timely treatment, sooner or later dooms the eye to irremediable blindness.

In the earlier stage, a prophylactic treatment is often effectual. The anomaly of refraction or accommodation is to be corrected by the proper adjustment of glasses. Eserine I have found also very useful. All use of mydriatics should be avoided, as their action is diametrically opposed to the desired result. Indeed, the use of mydriatics, if long persisted in, may induce glaucoma. When the disease is once established, there is but one treatment which offers any assurance of permanent cure or relief, and that is an operation—either iridectomy or sclerotomy. I prefer sclerotomy, for the following reasons : it accomplishes the desired result in a greater degree of certainty, it is less dangerous to the iris and crystalline lens ; it does not disfigure the pupil, causes much less pain, takes less time and instruments, and is easier made. The steps for making this operation are, according to Nauthner, as follows :

1. One per cent. solution of sulphate of eserine must be dropped into the eye before the operation.
2. The operation, if possible, should be made without narcosis.
3. Section, if possible, should be made upwards.
4. Enter with Von Graeffe's knife at one m.m. from the edge of the cornea, as if about to make a scleral flap.
5. When the knife has made the counter puncture, it is to be pushed slowly forward, and the operation ended in the slowest possible manner, and with a sawing motion of the knife.
6. Flap is not to be completed, but the apex is to be left.
7. The sum of the lengths of the two incisions should exceed the length of the incision in simple iridectomy.
8. Eserine must be again dropped into the eye, and a bandage applied.—F. B. TIFFANY, *Trans. Missouri Medical Association*, 1883.

TANNIN IN CARBUNCLE.—Dr. R. H. Johnson (*Medical Review*) has found tannin a specific for carbuncle. The dry powder is sprinkled on the carbuncles as long as it will dissolve. Twenty-four hours after it is washed off with castile soap and the sprinkling of tannin recommenced. The carbuncle soon heals up, he claims, without much pain.

MISCELLANY.

—Two Detroit Medical Colleges have recently been consolidated into one. A good example.

—The Summer term of the Post-Graduate School of Medicine will commence June 2, and continue till September.

—Cookery, Dr. T. Lauder Brunton thinks, has a perfect right to be ranked with music, painting, sculpture and architecture as one of the fine arts.

—A remarkable case of transplantation of muscle from a dog to the arm of a woman, is reported from Bellevue Hospital, and the first of the kind known in this country.

—Medical authority is tolerably well united in the opinion that cigars do not cause cancer. This, however, does not apply to the many alleged cigars which impose themselves upon a gullible people.

—A writer in the *London Lancet* says that "a consumptive patient is in a better condition for recovery if he lies on a couch in a judiciously selected spot in the open air even in winter than in a shut up room."

—Dr. Bukk G. Carleton will spend the summer in his new cottage at Whitefield, N. H., in close proximity to all White Mountain points. The profession will do well to bear this fact in mind when referring patients.

—The recent meeting of the American Medical Association, at New Orleans, was attended by about seven hundred physicians. The work was of the usual character of these associations, being more social than scientific.

—In threatened abortion, says the (*American Medical Digest*), we have frequently used half drachm doses of the fluid extract of conium with the best possible results as regards the prevention of this untoward event.

—A Bavarian chemist is reported (*Am. Invent.*) to have invented an enameling liquid which renders any species of stone or cement harder than granite, and gives it the indelible appearance of any mineral that may be desired.

—"McDade's formula in syphilis seems to be a great failure. It is less inert with the negro, but with the white race it has disappointed almost all who remember the enthusiastic predictions of Sims." So says the *Medical Herald*.

—In an examination upon physiology some years ago at South Kensington, the question was put : "What is bile and what are its uses?" One candidate's answer was, "Bile is formed in the stomach, and is used in cleaning carpets."

—It is Dr. William F. Hutchinson's opinion, stated in the *N. E. Medical Monthly*, April 15, that a majority of cases of hay-fever, where the period of onset is as easily calculable as a solar eclipse and as sure to come, may be aborted by a week's previous central galvanism.

—The Paris *Conseil D'Hygiene Publique* has determined to establish "houses of refuge" into which, on the appearance of croup or any other contagious disease, in one of their children, parents who are not in a position to protect their other children from contagion, may obtain admission for them.

—Powdered rice as a styptic remedy has a great effect on fresh wounds much superior to oxide of zinc. By mixing from four to eleven per cent. of it with lint, and using the lint thus treated as a compress, it is very effectual, and more valuable than subnitrate of bismuth, salicylic acid, or carbolic acid.

—Two hospitals for skin and cancer cases have recently been organized in this city. A building is rapidly approaching completion at 106th Street and Central Park, West, for one of the organizations, and the other is putting up pavilions and cottages at Fordham Heights on a farm, well situated for the purpose.

—In the *Médiz. Obozrenie*, No. 21, 1884, P. 808, Dr. P. G. Rosanoff, of Zwenigorod, records a case of chronic hydrocele, in which complete cure ensued after wearing a well-fitted elastic bag for about six weeks. An examination of the patient about fifteen months later showed that he was still entirely free from the former disease.

—An exceedingly interesting exhibition was recently given at the Clinical Society of the Post-Graduate Medical School by Dr. W. H. Porter, of the bacilli of syphilis which were found in a syphilitic lung. The exhibition was the more interesting from the fact of its being the first confirmation of Lustgarten's discovery in this country.

REMOVALS.—Dr. and Mrs. E. G. Cook, of Chicago, to the Aberdeen, Broadway and 21st Street, New York. Dr. George B. Durrie removed May 1, to 37 West 45th Street. Smith's Homœopathic Pharmacy has removed to 37 West 14th Street. Dr. Moses T. Runnelshas removed from Indianapolis, Indiana, to Kansas City, Missouri, where he will practice gynecology as a specialty.

—The thirty-eighth annual session of the American Institute of Homœopathy, will be held at the Lindell House, St. Louis, June 2, continuing four days. Most of the railroads terminating in St. Louis will sell tickets at reduced rates. Additional information may be obtained of Dr. E. M. Kellogg, 257 Broadway, New York, Dr. I. T. Talbot, 66 Marlborough Street, Boston and of Dr. A. C. Cowperthwait.

—"How shall Women Dress?" is a question that one would hardly expect to be discussed in so grave an organ of opinion as the *North American Review*, and yet in its June number this interesting topic is treated in a symposium, by five eminent writers who have given the subject much attention, viz., Charles Dudley Warner, Elizabeth Stuart Phelps, Dr. William A. Hammond, Mrs. E. M. King, and Dr. Kate J. Jackson.

—Dr. Austin Flint, Jr., adds four more cases of diabetes to the fifty-two reported to the American Medical Association. The patients were placed on strict anti-diabetic diet and Clemen's solution of arsenite of bromine, beginning with three drops, increased to five, was also given. Of these four cases three were permanently relieved. In conclusion he adds: *Diabetes has become to-day a disease easily and certainly curable, provided that the treatment be not begun too late.*

—The Southern Homœopathic Medical Association was organized in New Orleans on April 9th last, with officers as follows: Dr. C. E. Fisher, president; Dr. John H. Henry, of Montgomery, Ala., first vice-president; Dr. Louis A. Falligant, Savannah, Ga., second vice-president; Dr. A. L. Monroe, of Birmingham, recording secretary; C. Deady, San Antonio, corresponding secretary; J. G. Belden, New Orleans, treasurer. The prime object of the organization is said to be "to procure such legislation in the Southern States as will enable homœopaths to live there." It is much to be regretted, we think, that the cognomen which is the only objection to this class of practitioners, should be insisted upon. We are confident that the time is not far distant when this point will be more generally appreciated, and that good taste as well as a higher ethics demand non-sectarianism in all branches of

scientific investigation. It really seems as if a name were of more consequence to some than any principles which it is supposed to represent.

—According to the *Progrès Médical*, physicians are more numerous in Vienna than in any other city in Europe; there are ten times as many in proportion to the population as in London. This implies a dismal prospect for the younger men who must be content with very modest fees. One practitioner (whose name is not mentioned) is credited with \$40,000 a year, but the rest "ont tout lieu de désespérer." There is a great deal of complaint against the vast system of medical charities, which are extended indiscriminately and are taken advantage of by patients who are amply able to pay a physician, a system which is fast growing in this country to the detriment of all concerned.

—A recent number of *L'Union Médicale* relates a startling circumstance brought to light by the recent cholera epidemic in Paris. In one of the best localities of the city, renowned for the exquisite productions of its bakers, and especially for the manufacture of *pain de luxe*, some of the neighbors of these bakeries had complained again and again of the nauseating odors which pervaded their apartments, but the appearance of cholera at last gave point to their remonstrances, and the sanitary inspectors who were sent to investigate the matter found a communication between the water-closets of these houses and the reservoirs of water used for the making of this bread. The communication was forthwith cut off, but an immediate result of this procedure was a sensible deterioration in the quality of the bread. It appears that chemists have no difficulty in explaining that water saturated with "extract of water-closet" conveys a special property of raising the dough, giving to the bread the agreeable aspect and even taste which constitute the fundamental qualities of *pain de luxe*.

—The Commissioners of Charities and Correction are energetically pushing the work of adding to the facilities for accommodation on both Blackwell's and Hart's Islands. On Hart's Island they have begun the erection of an asylum for the accommodation of insane women whom the crowded condition of the institution on Blackwell's Island excludes from the latter establishment. It will be a two-story pavilion with a basement and capable of receiving 200 patients. The Commissioners are also continuing their endeavors to procure a farm on Long Island on which to erect a series of buildings for the insane, and which they have thus far been unable to purchase on account of the difficulties and consequent delays in securing proper deeds and releases on the several properties which they have in view. Four or five different farms have been under consideration by the Commissioners, and they hope very soon to be able to effect a final purchase. To meet their requirements the property must contain at least 1,500 or 2,000 acres. It is also proposed to make extensive alterations in the old Retreat Building on Blackwell's by an entire reconstruction and remodelling of the interior. As it now stands, the rooms are in the centre and between them and the outer walls is a corridor or hall running clear around the building. It is now proposed to throw these rooms on the outside and have the corridors and hallways in the centre. Fire escapes will also be placed on the outside. The contracts have also been given out for the new entrance and gate house, with iron railings around the new pavilion presented to the city by Mr. Marquand. The alteration of the Gouverneur Market into a reception hospital will be finished by the commencement of the heated term. Two ambulances and three physicians will be at its service and it will have accommodations for about forty patients.